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Skin microbiome in cutaneous T cell lymphoma by 16S and whole genome shotgun sequencing

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Supplementary Outline to Discussion

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Abbreviations: CTCL: Cutaneous T-cell lymphoma, WGS: Whole genome shotgun sequencing, OTU: Operational Taxonomic Unit, NMDS: Non-metric multidimensional scaling

To the Editor

The development of DNA sequencing methods have widened our conceptions of cutaneous microbial communities (Byrd et al., 2018, Eyerich et al., 2018, Fyhrqvist et al., 2016). Recently, we investigated the cutaneous microbiome in parapsoriasis, but did not find significant differences between healthy skin and diseased skin with the 16S method (Salava et al., 2017). *In vitro* studies have demonstrated associations between staphylococcal enterotoxins and cutaneous T cell lymphoma (CTCL) (Krejsgaard et al., 2014, Willerslev-Olsen et al., 2013, Blümel et al., 2019). We were thus interested in microbiome characteristics of CTCL and if they could add supplementary information to traditional diagnostics. Patients (n= 20) with mycosis fungoides stages IA-IIIB at sampling were included. All patients had cutaneous CTCL lesions and 11 patients were on bexarotene maintenance therapy (Supplementary Table S1). Skin swab samples were obtained from active CTCL lesions and from contralateral healthy-looking skin non-invasively using sterile gloves (Supplementary Figure S3). The extracted DNA from both lesional and non-lesional skin was analyzed by 16S and whole genome shotgun (WGS) sequencing. The sampling method, DNA extraction and sequence data analysis are outlined in more detail in the supplementary material (Supplementary Text 1) (Kong et al., 2017, Lu et al., 2017).

The 16S data (relative abundances) represented a total of 410 genera, 39 classes and 21 phyla. Four phyla: Actinobacteria (class Actinobacteria, 59.37 %), Firmicutes (predominantly the classes Clostridia and Bacilli, 15.02 %), Proteobacteria (mostly Alpha-, Gamma-, and Betaproteobacteria, 12.46 %) and Bacteroidetes (mainly Bacteroidia, 2.16 %) represented 89 % of all classified sequences and 10.19 % remained unclassified at the phylum level. The most common genera were *Staphylococcus* (30,0 %), *Corynebacterium*

(22,3 %) *Propionibacterium* (5,0 %) and *Streptococcus* (3,0 %) (Figure 1b, Supplementary Table S4). We applied oligotyping of the potential *Staphylococcus* sequences and the three most common oligotypes were identified as *S. epidermidis* (48,1 %), *S. aureus* (33,8 %) and *S. capitis* (18,0 %) and the rest were unidentified species (Supplementary Table S5).

DESeq2 (Love et al., 2014) was used to analyze the 16S sequencing data for differences between the sample types (lymphoma-affected vs. healthy-appearing skin) (Grogan et al., 2019). Comparisons based on a model corrected for the subject-specific variation but no significant differences in bacterial taxa (Figure 2, Supplementary Table S4) or in the *Staphylococcus* oligotypes (data not shown) were observed (Lindahl et al., 2019).

WGS data analyzed with BRACKEN (Lu et al., 2017) represented 1312 identified organisms at genus level, with *Cutibacterium* (member of the former genus *Propionibacterium*) (25 %), *Corynebacterium* (19 %) and *Staphylococcus* (18 %) as the most abundant genera (Supplementary Figure S2, Supplementary Table S2). We observed no significant differences at the genus level or in microbial diversity (Figure 2). 16S sequencing does not capture propionibacteria very well when compared with WGS (Meisel et al., 2016), therefore explaining the differences in abundances (5% vs. 25%). On the species level most abundant were *Cutibacterium acnes* (24 %), *Staphylococcus epidermidis* (7 %), *Staphylococcus aureus* (7 %) and *Corynebacterium kroppenstedtii* (6 %) (Figure 1a). WGS data was then analyzed with DESeq2 to test for different abundances of bacterial taxa by comparing sample types (lymphoma vs. healthy skin) (Supplementary Table S2).

The microbiome varied substantially based on the investigated body site and individual patient (Oh et al., 2016). WGS data at species level showed that *Staphylococcus argenteus* was more abundant in lymphoma skin. However, after removal of reads identified by BRACKEN as additionally mapping to human genome (and previously not

identified by BWA), *S. argenteus* was no longer identified as more abundant in lymphoma-affected skin (adjusted p-value 0.683). Interestingly, *S. argenteus* has been recently shown to express 4–6 fold higher levels of the alpha-hemolysin exotoxin compared to *S. aureus* (Johansson et al., 2019), and thus, the pathogenic role of the *S. argenteus* exotoxin may be more importance than the relative abundance of *S. argenteus*. This possibility needs to be addressed in future studies. The following 10 bacterial species were identified as more abundant in healthy-appearing skin samples (adjusted p-values < 0.05), regardless of additional reads mapping to human genome: *Streptomyces* sp. SM17, *Bordetella pertussis*, *Streptomyces* sp. PVA 94-07, *Methylobacterium oryzae*, *Serratia* sp. LS-1, *Burkholderia mallei*, *Enterobacteriaceae bacterium*, *Achromobacter ruhlandii*, *Pseudomonas* sp. A214, *Pseudomonas* sp. st29 (Supplementary Table S3). The known associations of these species to human diseases or skin disorders are summarized in Supplementary Table S6 and outlined in the supplementary material (Supplementary Text 2). The role and significance of the relative reduction of these opportunistic pathogens in MF skin remains to be elucidated.

Conflict of interest

All authors: no conflicts of interest

Data availability

The data analysed during this study are included in this published article and its supplementary information files. The raw sequences generated during this study have been uploaded to the European Nucleotide Archive (<https://www.ebi.ac.uk>), accession number: PRJEB36953.

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The study was approved by the Ethics Committee of Medicine of the Hospital District of Helsinki and Uusimaa (HUS), Finland, (approval number 12/13/03/01/2012), and all patients provided their written informed consent.

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Author contributions:

Conceptualization: AS, LV, AR, AL

Data Curation: AS, LV

Formal Analysis: PD, ALY, PL, LP, PA

Funding Acquisition: AS, AR, AL

Investigation: AS, ALY, PL, LP, PA, AR, AL

Methodology: AS, PD, ALY, PL, LP, PA

Project Administration: AS, LV, AL

Resources: AS, AR, AL

Software: AS, PD, PL, PA

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Tables

Table S1: Patient characteristics

Table S2: Differential abundance comparisons of species and genera in the WGS sequencing data

Table S3: P-values and species that were significantly more abundant in control samples (healthy appearing skin); adjusted p-values < 0.05

Table S4: Results of the 16 sequencing data

Table S5: Oligotyping results of the *Staphylococcus* sequences, 16S sequencing data

Table S6: Summary of identified species that were significantly more abundant in healthy-appearing skin samples (non-lesional): names, genera, earlier descriptions in human diseases, earlier descriptions in skin disorders

Figure legends

Figure 1: Microbiome data (WGS and 16S), grouped by subject and sample; naming of the samples: first number corresponds to patient identifier followed by a sample number, where odd numbers indicate lesional samples, while even numbers indicate non-lesional samples.

Figure 1a: Relative abundances of the 25 most common species (histogram; different species represented by different colors) in the WGS sequencing data, grouped by subject

and sample type; for each patient (p1-p20) there were 2 samples: from left to right, first lesional and then healthy skin

Figure 1b: Relative abundances of the 25 most abundant genera (histogram; different genera represented by different colors) in the 16S sequencing data, grouped by subject and sample type; for each patient (p1-p20) there were 2 samples: from left to right, first lesional and then healthy skin

Figure 2: Comparisons of the WGS and 16S microbiome sequencing data

Figure 2a: Alpha diversity comparisons of the WGS (left) and 16S (right) sequencing data; box plot comparisons of Shannon indices and inverse Simpson diversity, grouped by sample type. Lower and upper hinge of the box: 1st and 3rd quartile; whiskers: 1.5 * IQR; line: median, cross: mean; black points: actual values for each sample

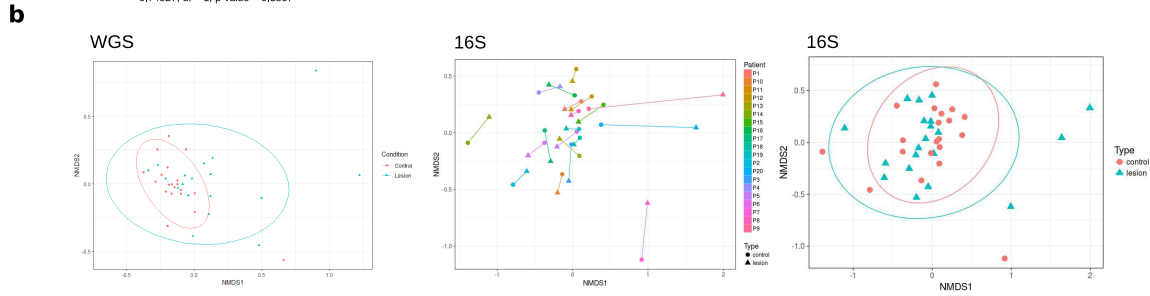
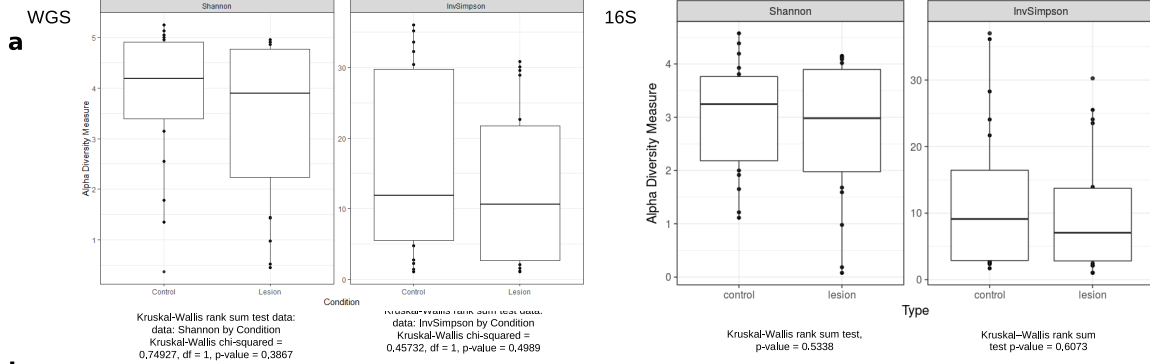
Figure 2b: Bray-Curtis-dissimilarity of the WGS (left) and 16S (middle and right) sequencing data, non-metric multidimensional scaling (NMDS) ordination, colors correspond to lesion type or subjects, shapes to sample types. The closer two samples are on the plot, the more similar they are to one another

Figure S1: Pairwise Bray-Curtis dissimilarity, box-blot comparisons of the 16S sequencing data; lower and upper hinge of the box: 1st and 3rd quartile; whiskers: 1.5 * IQR; line: median, cross: mean; black points: actual values for each sample

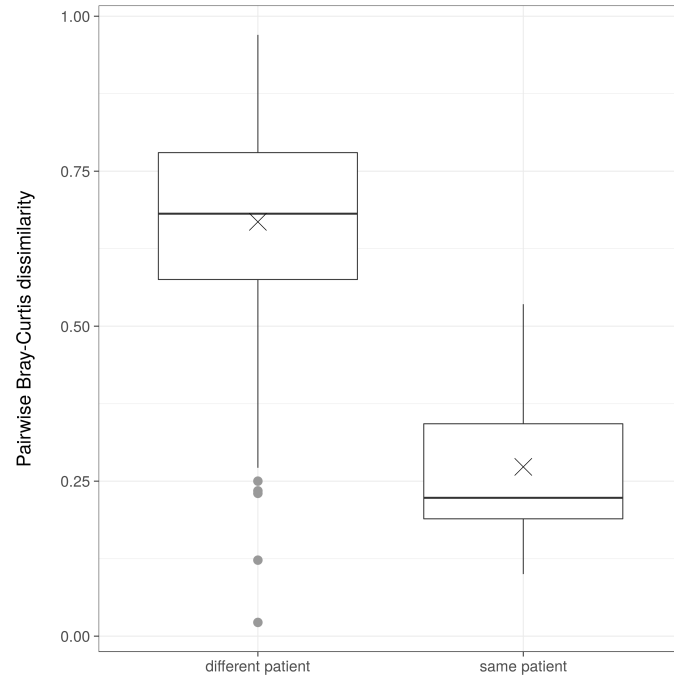
Figure S2: Relative abundances of the 25 most abundant genera (histogram; different genera represented by different colors) in the WGS sequencing data, grouped by subject and sample type; for each patient (p1-p20) there were 2 samples: from left to right, first lesional and then healthy skin

Figure S3: Patient with cutaneous T cell lymphoma (mycosis fungoides); swab samples, were obtained from lymphoma affected lesional skin and of healthy appearing skin. The patient is consented to the publication of the image.

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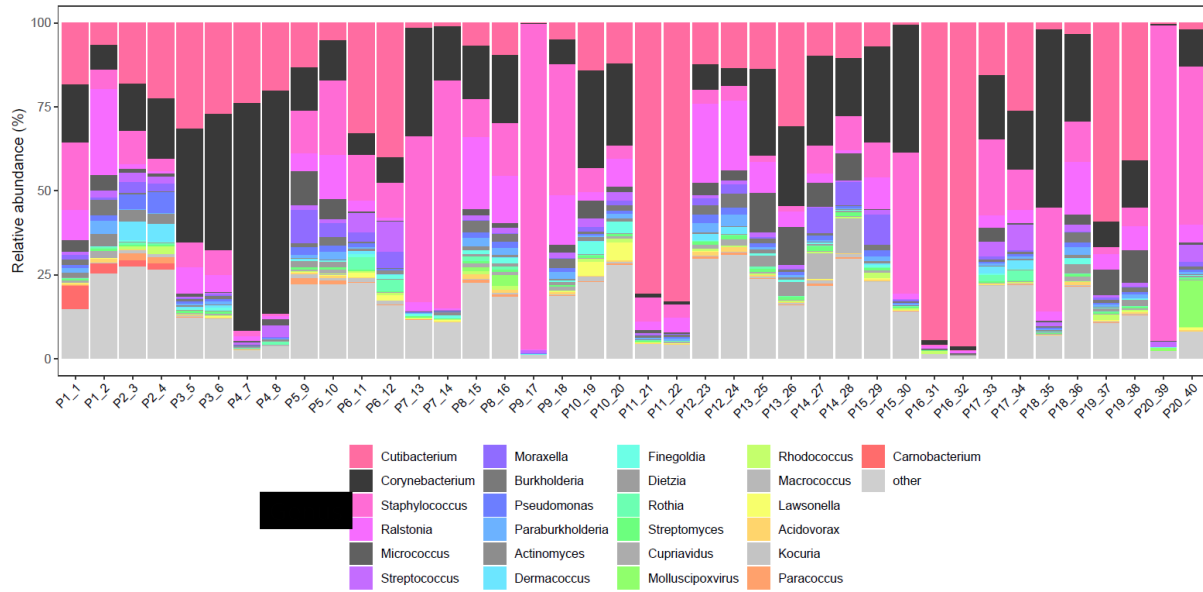


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Supplementary Text 1: Supplementary Outline to Methods

1. Skin preparatory regimen

Microbiome sampling and the clinical part of the study was carried out in March-October 2017 in the Department of Dermatology and Allergology, Helsinki University Hospital, Helsinki, Finland.

Twenty consecutive patients with cutaneous T-cell lymphoma (CTCL) were included in the study. The patients had previously been diagnosed with CTCL (confirmed by histopathology, immunohistopathology and T-cell receptor clonality) and were under treatment and follow-up at the university hospital (Figure S3). Time of diagnosis, previous and current treatments at sampling are detailed in Table 1 (patient characteristics, supplementary material). All patients had given an informed consent. None of the patients had received antibiotic treatments during the previous 3 months. The patients were allowed to use topical basic emollient creams. Prior to the sampling procedure, the skin was not manipulated or specifically treated.

2. Sampling procedure

Microbiome samples were collected from the skin with a sterile swab (Copan Flocked Swab[®], Copan Diagnostics Inc., Murrieta, CA, USA) by hands covered in sterile gloves. The swab used for sampling was first submerged gently into a sterile buffer solution (0.15 mol/l NaCl with 0.1% Tween 20), and subsequently brushed 20 times in crosswise directions over the sampled skin site (lesional and non-lesional sites, separately, of the same patient) (Salava et al., 2017). Lesional specimens were sampled directly from the

surface of the CTCL patches and the borders of the different CTCL patches were not crossed. Prior to the sampling, the patients' skin was not manipulated or disinfected. Control samples (non-lesional samples) were collected analogously from clinically healthy appearing skin on the contralateral side of the body (non-lesional samples). We chose to use the patient's own healthy skin as the site for the control sample to avoid inter-individual variation in the microbiome (Ursell et al., 2012, Kong et al., 2017, Flores et al., 2014).

To minimize the risk of sample cross-contamination, a new pair of sterile gloves was used for each separate sample. All sample specimens were placed immediately in sterile 1.5-ml Eppendorf® tubes (Eppendorf AG, Hamburg, Germany) and shock frozen in liquid nitrogen. The samples were conserved in an ambient temperature of -80°C until the DNA extraction and sequencing procedures. The average storage time from sampling to analysis was six months (Klymiuk et al., 2016).

3. DNA extraction methods and library preparation

The DNA's were extracted as described in our earlier publication (Salava et al., 2016). In addition, the 16S rRNA gene sequencing was performed as described earlier (Aho et al., 2019).

The shotgun metagenomics libraries were constructed from the same DNA used for the 16S rRNA sequencing using Nextera XT library prep kit 1.5. ng as starting material.

4. Sequencing protocol

The 16S rRNA sequencing was made using Illumina MiSeq and for the shotgun metagenomics data was produced with Illumina NextSeq500 and NovaSeq 6000.

5. Analysis of sequencing data

16S paired end reads were first quality checked with fastQC (v0.11.2) (Andrews et al., 2019) followed by quality (q=30), length (m=180), adapter and primer trimming (cutadapt v.1.8.3) (Martin et al., 2011). Filtered reads were subjected to mothur (1.39.5) following the Standard Operating Procedure (SOP) and additional changes as described in an earlier publication (Aho et al., 2019).

Whole Genome Sequencing reads in fastq format were quality checked with fastQC (v0.11.2) (Andrews et al., 2019) and then subjected to adapter trimming (cutadapt v1.15 and v1.17) (Martin et al., 2011) using the "--nextseq-trim=25" flag retaining only reads longer than 50 nucleotides and the quality score >25. Subsequently, the reads mapping to human genome (GCF_000001405.37_GRCh38.p11_genomic.fna database) were identified by the Burrows-Wheeler aligner (BWA-0.7.11) (Li et al., 2009) and removed from further analyses with the aid of samtools (v1.8) (Li, Handsaker et al., 2009). The reads from NextSeq500 and NovaSeq runs were combined and subjected to downstream analysis with BRACKEN (Bayesian Reestimation of Abundance with Kraken) (v2.0) (Lu et al., 2017) using the KRAKEN2 (v2.0.7-beta) (Wood et al., 2014) taxonomic classification system (database GLIBCXX_3.4.21, 10.01.2019). BRACKEN analysis resulted in classification between 7.99-94.1 % reads per sample. However, 0.04 to 37.11 % of reads additionally mapped to human genome and were removed from the analysis, bringing the final fraction of classified reads to 31.18-94.13 %. The species and genera identifications ranged from 148 to 4116 and 88 to 1248, respectively and were subjected to estimations

of alpha and beta diversities with R! packages Phyloseq (McMurdie et al., 2013) and DESeq2 (Love et al., 2014).

Figure S3: The patient is consented to the publication of the image.

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Patient nr.	Stage At the time of sampling (stage at diagnosis)	Sex	Age (y)	Diagnosis time (years prior sampling)	Sample site	Therapy at sampling (year of treatment started)	Previous therapies (year of treatment)	Concomitant diseases
1	IA (IA)	M	96	2008 (8)	right flank	MTX (since 2011)	EB (2014)	hypothyreosis, asthma, prostatic hyperplasia
2	IA (IA)	F	91	2012 (4)	right flank	Bexarotene (since 2016)	NB-UVB (2015, 2014, 2013), PUVA (2015, 2017)	breast cancer (2010), asthma, hypertension
3	IIB (IIB)	M	82	1987 (29)	right shin	Bexarotene (since 2005)	oral/bath PUVA (2001, 2002, 2004, 2005, 2010), NB-UVB (2004, 2005), IFNa (2017),	atrial fibrillation, hypertension, renal insufficiency, benign prostatic hyperplasia
4	IA (IA)	M	70	2002	left flank	none	oral/bath PUVA (annually 2005 2009, 2011, 2014); EB (2005, 2008)	type II diabetes, hypertension, hypercholesterolemia
5	IIB (IIB)	M	76	2006	right forearm	Bexarotene since 2007	oral PUVA 2006, 2007	prostate carcinoma, dyslipidemia, hypothyreosis, anemia
6	IIB (IIB)	M	75	2011	left side of the neck	Bexarotene since 2011	local PUVA 2015; EB (2012, 2014, 2015, 2016), IFNa 2016-2017	type II diabetes, hypercholesterolemia,
7	IB (IIB)	M	82	2008	left inguinal fold	Bexarotene since 2014	NB-UVB (2009, 2011), bath PUVA (2012, 2013); EB (2015, 2017)	glaucoma, coronary heart disease, renal insufficiency
8	IIB (IIB)	M	53	2010	right forearm	Bexarotene since 2010	IFNa 2013-2014, oral PUVA 2015, 2016; EB (2015-2016)	hypercholesterolemia, hypertension, type II diabetes, renal insufficiency
9	IA (IIA)	M	52	2013	right flank	Bexarotene since 2014	NB-UVB 2013, oral PUVA 2013	asthma, allergic rhinoconjunctivitis, atopic dermatitis
10	IB (IB)	M	74	2012	left thigh	Bexarotene since 2013	oral PUVA 2012, 2013	osteoporosis, coronary heart disease
11	IA (III)	M	56	2016	right flank	MTX since 2016	NB-UVB 2016	sleep apnea, allergic rhinoconjunctivitis, atopic dermatitis
12	IIB (IIB)	F	63	2016	right thigh	none	EB 2016	arterial hypertension, diverticulitis, hypercholesterolemia, contact allergies
13	IA (IA)	M	21	2016	right thigh	none	EB 2016	none
14	IA (IA)	F	54	2017	right upper arm	none	NB-UVB 2017	atopic dermatitis, contact allergies, depression, heart arrhythmias
15	IB (IB)	F	52	2010	abdomen right	Bexarotene since 2017	NB-UVB 2011, 2012, 2016, oral PUVA 2017	hypothyreosis, asthma, atopic dermatitis
16	IA (IA)	M	43	2011	right back	none	MTX 2011-2012; oral PUVA (2011, 2014, 2016)	none
17	IIA (IIA)	M	63	2014	left thigh	Bexarotene since 2016	MTX 2014-2015, Acitretin 2015, NB-UVB 2014, oral PUVA 2014, 2015	peripheral atherosclerosis, hypothyreosis, dyslipidemia,
18	IIB (IIB)	F	69	2014	right thigh	Bexarotene since 2017	NB-UVB 2016, 2017, oral PUVA 2017, Acitretin 2016-2017, MTX 2017	hypertension, atrial fibrillation, asthma, dyslipidemia, renal insufficiency, coronary artery disease, adenocarcinoma of the colon
19	IA (IA)	M	25	2016	left buttock	none	bath PUVA 2016, 2017	none
20	IIB (IIB)	F	42	2014	abdomen left	Bexarotene since 2017	NB-UVB 2014, oral PUVA 2016, 2017, MTX 2014-2015, ECP 2017	atopic dermatitis, asthma, depression, dyslipidemia,

								hypothyreosis
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Abbreviations:

F: Female

M: Male

LPP: Large plaque parapsoriasis

SPP: Small plaque parapsoriasis

NB-UVB: Narrow-band ultraviolet B phototherapy

SUP: Selective ultraviolet phototherapy

PUVA: Psoralen ultraviolet A photochemotherapy

ECP: Extracorporeal photopheresis

MTX: Methotrexate

IFNa: Interferon-alpha

EB: Electron beam

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	baseMean	log2FoldCh	lfcSE	stat	pvalue	padj
<i>Streptomyces</i> sp. SM17	11.13063	-23.3284	1.95449	-11.9358	7.70E-33	2.80E-29
<i>Bordetella pertussis</i>	175.7464	-27.0922	2.535417	-10.6855	1.19E-26	2.17E-23
<i>Streptomyces</i> sp. PVA 94-07	13.5985	-23.6034	2.506801	-9.41573	4.70E-21	5.70E-18
<i>Methylobacterium oryzae</i>	5.936652	-22.4632	2.409511	-9.32273	1.13E-20	1.03E-17
<i>Serratia</i> sp. LS-1	5.682808	-22.4188	2.451911	-9.14341	6.05E-20	4.40E-17
<i>Burkholderia mallei</i>	15.64886	-23.794	2.921648	-8.14405	3.82E-16	2.32E-13
Enterobacteriaceae bacterium ENNII	15.55911	-21.9864	2.921651	-7.52535	5.26E-14	2.73E-11
<i>Homo sapiens</i>	1029155	4.356723	0.650808	6.694328	2.17E-11	9.86E-09
<i>Achromobacter ruhlandii</i>	93.17166	-8.3322	1.779652	-4.68193	2.84E-06	0.001149
<i>Pseudomonas</i> sp. A214	13.08098	-5.67961	1.421667	-3.99504	6.47E-05	0.02034
<i>Staphylococcus argenteus</i>	306.9312	2.798081	0.7019	3.98644	6.71E-05	0.02034
<i>Pseudomonas</i> sp. St29	12.09194	-5.43832	1.358924	-4.00193	6.28E-05	0.02034
<i>Pectobacterium polaris</i>	9.264267	-5.17848	1.42939	-3.62286	0.000291	0.081559
<i>Streptomyces sampsonii</i>	13.83509	-5.89603	1.669951	-3.53066	0.000415	0.107747
<i>Streptomyces lividans</i>	12.27656	-6.65078	1.933436	-3.43988	0.000582	0.141188
<i>Clostridium botulinum</i>	452.2186	1.293666	0.380341	3.401334	0.000671	0.152514
<i>Geoalkalibacter subterraneus</i>	26.34751	-1.8187	0.5434	-3.34688	0.000817	0.17494
<i>Alcanivorax</i> sp. N3-2A	38.09102	-2.10179	0.641071	-3.27856	0.001043	0.189844
<i>Streptococcus dysgalactiae</i>	2144.21	3.399416	1.030111	3.30005	0.000967	0.189844
<i>Pseudomonas mosselii</i>	10.66135	-4.46957	1.362287	-3.28093	0.001035	0.189844
<i>Kosakonia radicinans</i>	8.170031	-5.13189	1.849675	-2.77448	0.005529	0.196343
<i>Rhodomicrobium vannielii</i>	30.63943	-2.10301	0.656983	-3.20102	0.001369	0.196343
<i>Xylanimonas cellulositytica</i>	139.8331	-0.9742	0.385972	-2.52403	0.011602	0.196343
<i>Acidimicrobium ferrooxidans</i>	24.02401	-1.99331	0.739527	-2.69538	0.007031	0.196343
<i>Geobacter pickeringii</i>	37.93473	-1.62133	0.610645	-2.6551	0.007928	0.196343
<i>Burkholderia metallica</i>	255.2039	-1.46735	0.560483	-2.61801	0.008844	0.196343
<i>Halobacterium salinarum</i>	15.35235	-2.27692	0.915236	-2.4878	0.012854	0.196343
<i>Bradymonas sediminis</i>	30.6499	-1.81057	0.640728	-2.8258	0.004716	0.196343
<i>Xanthomonas oryzae</i>	42.16942	-1.39254	0.546441	-2.54839	0.010822	0.196343
<i>Bradyrhizobium erythrophlei</i>	802.526	-1.17204	0.469967	-2.49388	0.012635	0.196343
<i>Burkholderia</i> sp. RPE67	323.0428	-1.58985	0.609303	-2.60929	0.009073	0.196343
<i>Azoarcus</i> sp. DN11	145.2645	-1.50924	0.524426	-2.87789	0.004004	0.196343
Candidatus <i>Koribacter versatilis</i>	56.99019	-1.4227	0.534536	-2.66157	0.007778	0.196343
<i>Halotalea alkalilenta</i>	38.55573	-1.71937	0.617454	-2.78462	0.005359	0.196343
<i>Komagataeibacter xylinus</i>	48.50589	-2.53964	0.929082	-2.73349	0.006267	0.196343
<i>Fibrella</i> sp. ES10-3-2-2	12.84419	-2.59664	0.897399	-2.89352	0.00381	0.196343
<i>Hoeflea phototrophica</i>	24.45562	-1.96692	0.747627	-2.63089	0.008516	0.196343
<i>Clostridium tetani</i>	30.6221	1.785897	0.705128	2.532727	0.011318	0.196343
<i>Herbaspirillum seropedicae</i>	289.4831	-1.41694	0.489881	-2.89241	0.003823	0.196343
<i>Clostridium saccharoperbutylacetoni</i>	45.97916	2.081401	0.666279	3.12392	0.001785	0.196343
<i>Collimonas arenae</i>	198.5254	-1.48375	0.526266	-2.81939	0.004812	0.196343
<i>Bradyrhizobium</i> sp. ORS 3257	301.391	-1.46616	0.543122	-2.69951	0.006944	0.196343
<i>Thiocystis violascens</i>	43.91913	-1.78388	0.641396	-2.78125	0.005415	0.196343
<i>Burkholderia oklahomensis</i>	188.9955	-1.48524	0.536293	-2.76946	0.005615	0.196343
<i>Halobacillus halophilus</i>	14.36545	-2.52882	0.942481	-2.68315	0.007293	0.196343
<i>Serratia</i> sp. FGI94	15.16026	-2.59944	1.047014	-2.48272	0.013038	0.196343
<i>Kitasatospora setae</i>	113.3681	-0.94484	0.371221	-2.54522	0.010921	0.196343
<i>Clostridium beijerinckii</i>	109.3354	1.458743	0.55972	2.6062	0.009155	0.196343
<i>Nitrospira defluvii</i>	16.05457	-2.46999	0.835069	-2.95782	0.003098	0.196343
<i>Dehalogenimonas formicexedens</i>	11.84916	-2.44892	0.944753	-2.59213	0.009538	0.196343

Candidatus Promineofilum breve	44.76118	-1.4558	0.551895	-2.63781	0.008344	0.196343
Halomonas chromatireducens	16.37105	-1.87294	0.677506	-2.76446	0.005702	0.196343
Hyphomicrobium nitratorans	46.09128	-2.02927	0.676522	-2.99957	0.002704	0.196343
Cystobacter fuscus	160.1816	-0.99716	0.397365	-2.50942	0.012093	0.196343
Rhizobium sp. CIAT894	38.12337	-2.04519	0.681291	-3.00193	0.002683	0.196343
Burkholderia seminalis	228.542	-1.38849	0.533723	-2.60151	0.009281	0.196343
Borrelia miyamotoi	34.58952	3.065197	0.959851	3.19341	0.001406	0.196343
Komagataeibacter europaeus	14.05994	-2.45152	0.856957	-2.86073	0.004227	0.196343
Bradyrhizobiaceae bacterium SG-6C	125.8117	-1.578	0.530001	-2.97736	0.002907	0.196343
Cloacibacillus porcorum	13.28384	-2.47327	0.841255	-2.93997	0.003282	0.196343
Halomicrobium mukohataei	11.15167	-2.86186	0.996847	-2.87091	0.004093	0.196343
Desulfococcus multivorans	16.9677	-2.25732	0.908319	-2.48516	0.012949	0.196343
Bordetella trematum	98.28672	-1.36623	0.541886	-2.52126	0.011693	0.196343
Sphaerobacter thermophilus	52.84899	-1.11288	0.443506	-2.50928	0.012098	0.196343
Agrobacterium vitis	42.34258	-1.65882	0.558751	-2.9688	0.00299	0.196343
Staphylococcus sp. M0911	424.5651	1.604676	0.585072	2.742698	0.006094	0.196343
Echinicola strongylocentroti	10.8961	-2.78248	1.111078	-2.5043	0.012269	0.196343
Flavisolibacter tropicus	48.73353	-1.55495	0.58524	-2.65695	0.007885	0.196343
Methylomicrobium sp. wino1	9.542653	-3.05097	1.04558	-2.91797	0.003523	0.196343
Burkholderia territorii	346.9632	-1.56201	0.583128	-2.67867	0.007392	0.196343
Xanthomonas sacchari	100.0469	-1.29568	0.495599	-2.61437	0.008939	0.196343
Haloarcula sp. CBA1115	4.56142	-4.30136	1.615647	-2.66232	0.00776	0.196343
Paraburkholderia sprentiae	872.7312	-1.33425	0.529802	-2.5184	0.011789	0.196343
Cupriavidus pauculus	600.1976	-1.52855	0.536495	-2.84915	0.004384	0.196343
Caulobacter henricii	64.59854	-1.35925	0.541338	-2.51091	0.012042	0.196343
Limnohabitans sp. 103DPR2	56.01389	-1.46264	0.571732	-2.55826	0.01052	0.196343
Bacillus oceanisediminis	15.79563	-1.99788	0.795964	-2.51001	0.012073	0.196343
Pandoraea thiooxydans	231.1461	-1.39123	0.508649	-2.73515	0.006235	0.196343
Phaeobacter sp. LSS9	5.04048	-4.4424	1.63178	-2.72242	0.006481	0.196343
Caulobacter mirabilis	128.5123	-1.39775	0.537736	-2.59933	0.009341	0.196343
Lacunisphaera limnophila	58.24474	-1.64176	0.619919	-2.64835	0.008089	0.196343
Bordetella genomosp. 13	171.8408	-1.42804	0.511764	-2.79043	0.005264	0.196343
Libanicoccus massiliensis	34.76263	-1.68336	0.6549	-2.57041	0.010158	0.196343
Desulfuromonas sp. DDH964	33.46485	-1.49592	0.559601	-2.67318	0.007513	0.196343
Anaeromyxobacter sp. Fw109-5	112.3353	-1.30889	0.482851	-2.71076	0.006713	0.196343
Alcanivorax xenomutans	29.99751	-1.68782	0.66568	-2.53548	0.011229	0.196343
Granulicella mallensis	60.71829	-1.367	0.524337	-2.6071	0.009131	0.196343
Geobacter sp. M21	20.31273	-1.79568	0.717458	-2.50284	0.01232	0.196343
Cyanobium sp. NIES-981	62.82027	-1.64926	0.590786	-2.79164	0.005244	0.196343
Collimonas fungivorans	303.25	-1.20633	0.466325	-2.58689	0.009685	0.196343
Streptomyces venezuelae	173.3353	-1.00105	0.352431	-2.84042	0.004505	0.196343
Sphingobium sp. RAC03	83.40695	-1.57962	0.617487	-2.55815	0.010523	0.196343
Thauera hydrothermalis	230.7644	-1.52682	0.59012	-2.5873	0.009673	0.196343
Herminiimonas arsenicoxydans	81.576	-1.661	0.594453	-2.79416	0.005203	0.196343
Rhizobium sp. NXC14	32.35091	-1.50045	0.567353	-2.64466	0.008177	0.196343
Acidianus brierleyi	3.810802	5.873655	2.362252	2.486464	0.012902	0.196343
Afipia sp. GAS231	268.1899	-1.25968	0.48572	-2.59343	0.009502	0.196343
Methylomicrobium album	31.13957	-1.79704	0.554142	-3.24293	0.001183	0.196343
Cupriavidus necator	1671.054	-1.30836	0.521105	-2.51074	0.012048	0.196343
Desulfomicrobium baculatum	18.5654	-1.65919	0.649077	-2.55623	0.010581	0.196343

Enterobacteriaceae bacterium w6	14.07228	-3.79666	1.292994	-2.93633	0.003321	0.196343
Zoogloeaceae bacteirum Par-f-2	46.89327	-2.133	0.713449	-2.9897	0.002793	0.196343
Synechococcus sp. KORDI-49	9.799147	-2.77994	1.064303	-2.61198	0.009002	0.196343
Aquabacterium olei	463.8258	-1.50073	0.562262	-2.6691	0.007606	0.196343
Lactobacillus paracollinoides	10.40526	-2.49749	1.00224	-2.49191	0.012706	0.196343
Nitratireductor basaltis	17.78089	-2.51336	0.854271	-2.94211	0.00326	0.196343
Burkholderia glumae	370.6321	-1.30092	0.520039	-2.50158	0.012364	0.196343
Methylococcus capsulatus	65.39526	-1.68324	0.584038	-2.88208	0.003951	0.196343
Ectothiorhodospira sp. BSL-9	33.29973	-1.38379	0.541784	-2.55413	0.010645	0.196343
Verrucomicrobium sp. GAS474	41.90553	-1.42135	0.572616	-2.48221	0.013057	0.196343
Sulfurimonas autotrophica	2.525458	5.674756	2.109546	2.690036	0.007144	0.196343
Limnohabitans sp. 63ED37-2	224.2197	-1.40161	0.557041	-2.51617	0.011864	0.196343
Pseudomonas cichorii	39.8636	-1.75597	0.679745	-2.58327	0.009787	0.196343
Ralstonia solanacearum	28645.12	-1.40229	0.518177	-2.70619	0.006806	0.196343
Klebsiella quasivariicola	9.804078	-2.6105	1.034611	-2.52317	0.01163	0.196343
Rhodobacteraceae bacterium BAR1	20.05714	-1.96732	0.787748	-2.4974	0.012511	0.196343
Tolomonas auensis	10.49797	-2.43148	0.875856	-2.77612	0.005501	0.196343
Campylobacter curvus	7.36574	-2.89137	1.157789	-2.49732	0.012514	0.196343
Phreatobacter cathodiphilus	134.1645	-1.31321	0.428734	-3.06298	0.002191	0.196343
Desulfomicrobium orale	20.82723	-1.72157	0.632769	-2.72069	0.006515	0.196343
Sulfuriferula sp. AH1	21.73259	-1.88121	0.712539	-2.64015	0.008287	0.196343
Bradyrhizobium diazoefficiens	616.6418	-1.45138	0.527659	-2.7506	0.005949	0.196343
Yoonia vestfoldensis	28.90207	-1.62121	0.647394	-2.50421	0.012272	0.196343
Staphylococcus simiae	130.2543	1.64278	0.532886	3.082796	0.002051	0.196343
Achromobacter denitrificans	312.1598	-1.21932	0.491065	-2.483	0.013028	0.196343
Hyphomicrobium denitrificans	73.60922	-1.55237	0.552838	-2.808	0.004985	0.196343
Bradyrhizobium lablabi	778.1702	-1.49806	0.577733	-2.593	0.009514	0.196343
Pseudomonas alcaliphila	50.58343	-1.77169	0.69637	-2.54418	0.010954	0.196343
Burkholderia sp. MSMB617WGS	13.44642	-3.74286	1.28299	-2.9173	0.003531	0.196343
Paucibacter sp. KCTC 42545	830.5104	-1.36192	0.516493	-2.63686	0.008368	0.196343
Rhodopirellula baltica	7.745615	-2.67948	1.046617	-2.56014	0.010463	0.196343
Nitrosospira lacus	9.527931	-1.97099	0.791058	-2.49159	0.012717	0.196343
Pandoraea vervacti	194.8922	-1.37941	0.511609	-2.69623	0.007013	0.196343
Burkholderia sp. KJ006	104.0198	-4.89787	1.887057	-2.59551	0.009445	0.196343
Cupriavidus sp. USMAA1020	195.8952	-2.19893	0.827682	-2.65673	0.00789	0.196343
Hyphomonas sp. CACIAM 19H1	25.58665	-1.30321	0.490394	-2.65748	0.007873	0.196343
Bradyrhizobium sp. WSM471	154.5223	-1.94489	0.632814	-3.07339	0.002116	0.196343
Streptococcus intermedius	376.4848	-1.71327	0.61877	-2.76883	0.005626	0.196343
Paraburkholderia terrae	672.2825	-1.50197	0.552332	-2.71932	0.006542	0.196343
Sutterella megalosphaeroides	46.04743	-1.55529	0.590295	-2.63476	0.00842	0.196343
Acidobacterium capsulatum	44.4798	-1.88733	0.661765	-2.85196	0.004345	0.196343
Rhodoferax antarcticus	147.2561	-1.62553	0.523616	-3.10444	0.001906	0.196343
Helicobacter pylori	33.35474	1.630179	0.589567	2.765046	0.005691	0.196343
endosymbiont of unidentified scaly si	26.98335	-1.46161	0.574201	-2.54546	0.010913	0.196343
Orrella dioscoreae	167.4957	-1.39352	0.523026	-2.66433	0.007714	0.196343
Nitrosomonas sp. AL212	6.719444	-4.85083	1.865537	-2.60023	0.009316	0.196343
Slackia heliotrinireducens	53.89719	-1.74528	0.696206	-2.50685	0.012181	0.196343
Woeseia oceani	13.09536	-1.8653	0.727938	-2.56244	0.010394	0.196343
Mariprofundus ferrinatatus	6.231009	-3.56207	1.306778	-2.72584	0.006414	0.196343
Bacteroides vulgatus	401.5325	-1.91495	0.729036	-2.62669	0.008622	0.196343

Melaminivora sp. SC2-9	530.7087	-1.38306	0.555689	-2.4889	0.012814	0.196343
Pseudomonas chlororaphis	346.14	-1.07389	0.420959	-2.55105	0.01074	0.196343
Natrinema pellirubrum	8.01346	-3.30815	1.062955	-3.11222	0.001857	0.196343
Aeromonas hydrophila	125.9879	-0.92644	0.363369	-2.54958	0.010785	0.196343
Prevotella dentalis	151.5854	-1.47196	0.554548	-2.65434	0.007946	0.196343
Archangium gephyra	139.3558	-1.24953	0.476581	-2.62186	0.008745	0.196343
Desulfovibrio desulfuricans	46.58184	-1.7721	0.573201	-3.09159	0.001991	0.196343
Pelobacter carbinolicus	16.30186	-2.39163	0.824647	-2.90018	0.003729	0.196343
Pseudomonas stutzeri	864.7782	-1.46074	0.567584	-2.5736	0.010065	0.196343
Bradyrhizobium sp. ORS 285	201.8567	-1.30802	0.46873	-2.79055	0.005262	0.196343
Burkholderia insecticola	514.9367	-1.38841	0.543457	-2.55477	0.010626	0.196343
Xanthomonas albilineans	32.365	-1.97033	0.688624	-2.86126	0.00422	0.196343
Achromobacter spanius	232.616	-1.18994	0.477815	-2.49038	0.012761	0.196343
Halomonas subglaciescola	22.97807	-1.98003	0.782171	-2.53145	0.011359	0.196343
Phenylobacterium zucineum	151.7072	-1.4449	0.575502	-2.51068	0.01205	0.196343
Micromonospora auratinigra	86.85877	-1.44203	0.536165	-2.68953	0.007155	0.196343
Paraburkholderia graminis	547.9771	-1.72889	0.663914	-2.60409	0.009212	0.196343
Dechloromonas sp. HYN0024	43.92386	-1.60612	0.64699	-2.48245	0.013048	0.196343
Rhodospirillum rubrum	54.6124	-1.17882	0.457787	-2.57503	0.010023	0.196343
Sorangium cellulosum	653.9289	-1.38218	0.463073	-2.98479	0.002838	0.196343
Desulfovibrio magneticus	74.54782	-1.25487	0.461292	-2.72034	0.006521	0.196343
Azorhizobium caulinodans	103.5418	-1.11339	0.438907	-2.53673	0.011189	0.196343
Porphyrobacter neustonensis	38.38308	-1.37458	0.516069	-2.66355	0.007732	0.196343
Comamonas serinivorans	408.0872	-1.32214	0.477735	-2.76751	0.005649	0.196343
Thioalkalivibrio sulfidiphilus	57.55934	-1.56289	0.590131	-2.64837	0.008088	0.196343
Polaromonas sp. SP1	451.6687	-1.39468	0.474506	-2.93922	0.00329	0.196343
Herbaspirillum rubrisubalbicans	206.71	-1.3242	0.525487	-2.51995	0.011737	0.196343
Acidiphilium multivorum	88.90498	-1.3907	0.558407	-2.49048	0.012757	0.196343
Halogeometricum borinquense	8.73868	-2.81975	1.020782	-2.76234	0.005739	0.196343
Nitrobacter hamburgensis	83.39907	-1.54318	0.597267	-2.58373	0.009774	0.196343
Candidatus Desulforudis audaxviator	19.56913	-2.65333	0.906596	-2.92669	0.003426	0.196343
Delftia tsuruhatensis	852.7595	-1.43036	0.518967	-2.75617	0.005848	0.196343
Myxococcus xanthus	78.23294	-1.745	0.573625	-3.04206	0.00235	0.196343
Syntrophobacter fumaroxidans	17.62235	-2.06723	0.810863	-2.54942	0.01079	0.196343
Avibacterium paragallinarum	7.670832	-3.7284	1.477338	-2.52373	0.011612	0.196343
Oleiphilus messinensis	4.585674	-2.86799	1.12326	-2.55327	0.010672	0.196343
Pseudomonas kribbensis	49.90942	-1.89255	0.672597	-2.8138	0.004896	0.196343
Bradyrhizobium icense	439.9763	-1.27757	0.486048	-2.62849	0.008576	0.196343
Jeongeupia sp. USM3	81.18859	-1.4031	0.495351	-2.83255	0.004618	0.196343
Cupriavidus sp. USMAHM13	244.7913	-2.0279	0.723443	-2.80312	0.005061	0.196343
Gemmatirosa kalamazoonensis	167.5696	-1.41788	0.488277	-2.90384	0.003686	0.196343
Methylosinus trichosporium	62.60254	-1.60891	0.58128	-2.76787	0.005642	0.196343
Marinithermus hydrothermalis	72.338	-1.62521	0.603218	-2.69424	0.007055	0.196343
Halomonas sp. GFAJ-1	4.714566	-4.35313	1.413225	-3.08028	0.002068	0.196343
Chitinophaga caeni	29.49516	-1.63351	0.654234	-2.49682	0.012531	0.196343
Micromonospora siamensis	80.69973	-0.91352	0.356802	-2.5603	0.010458	0.196343
Parvularcula bermudensis	6.772203	-3.43297	1.126641	-3.04709	0.002311	0.196343
Azoarcus sp. SY39	86.10917	-1.61378	0.600721	-2.68641	0.007222	0.196343
Clostridium pasteurianum	87.59801	1.911767	0.593822	3.219428	0.001284	0.196343
Staphylococcus cohnii	246.8407	1.197122	0.421129	2.842651	0.004474	0.196343

Bacterioplanes sanyensis	6.318311	-2.72265	0.879535	-3.09555	0.001964	0.196343
Chlorobaculum parvum	18.6759	-2.39393	0.852885	-2.80686	0.005003	0.196343
Burkholderiales bacterium GJ-E10	69.06494	-1.53066	0.598051	-2.55941	0.010485	0.196343
Neisseria weaveri	24.93216	-2.61054	0.882842	-2.95697	0.003107	0.196343
Maricaulis maris	24.08755	-1.39143	0.527174	-2.63941	0.008305	0.196343
Acidovorax sp. RAC01	499.9973	-1.34832	0.516196	-2.61204	0.009	0.196343
Marinobacter similis	15.03429	-2.46615	0.932603	-2.64437	0.008184	0.196343
Burkholderia sp. BDU6	129.6112	-1.37208	0.542216	-2.53051	0.01139	0.196343
Rhizobium jaguaris	41.52251	-1.51884	0.554866	-2.73731	0.006194	0.196343
Burkholderia pseudomultivorans	194.4964	-1.72222	0.690316	-2.49483	0.012602	0.196343
Thauera chlorobenzoica	80.80729	-1.76771	0.597558	-2.95822	0.003094	0.196343
Simiduia agarivorans	15.42822	-2.40419	0.962715	-2.4973	0.012514	0.196343
Streptomyces pristinaespiralis	71.37249	-1.15036	0.440128	-2.61369	0.008957	0.196343
Verrucomicrobium spinosum	32.58723	-1.49856	0.570424	-2.6271	0.008612	0.196343
Pelobacter sp. SFB93	14.86473	-2.89653	1.045065	-2.77163	0.005578	0.196343
Dickeya chrysanthemi	29.53323	-1.4768	0.540514	-2.73222	0.006291	0.196343
Rhizobium gallicum	64.92122	-1.5053	0.557002	-2.70251	0.006882	0.196343
Cupriavidus sp. USMAA2-4	2076.938	-1.44209	0.57161	-2.52285	0.011641	0.196343
Mesorhizobium loti	188.4732	-1.39868	0.52247	-2.67706	0.007427	0.196343
Nitrosomonas sp. Is79A3	34.09056	-2.43768	0.776372	-3.13983	0.00169	0.196343
Phyllobacterium zundukense	23.60907	-1.3494	0.538014	-2.50811	0.012138	0.196343
Indioceanicola profundi	75.73499	-1.18126	0.464166	-2.5449	0.010931	0.196343
Geobacter sulfurreducens	78.55701	-1.87158	0.670111	-2.79294	0.005223	0.196343
Methyloceanibacter caenitepidi	23.13999	-1.92898	0.707975	-2.72465	0.006437	0.196343
Staphylococcus haemolyticus	4880.898	1.393972	0.529892	2.63067	0.008522	0.196343
Burkholderia lata	593.7104	-1.45066	0.532045	-2.72658	0.006399	0.196343
Thauera sp. K11	300.7952	-1.24063	0.438102	-2.83183	0.004628	0.196343
Cronobacter malonaticus	5.194957	-4.48227	1.756602	-2.55167	0.010721	0.196343
Methyloversatilis sp. RAC08	89.54638	-1.23714	0.478967	-2.58293	0.009796	0.196343
Methylocaldum marinum	61.65105	-1.41895	0.522653	-2.7149	0.006629	0.196343
Bradyrhizobium sp. 3 85S1MB	212.6693	-1.45659	0.532127	-2.7373	0.006195	0.196343
Amycolatopsis mediterranei	150.3613	-0.94555	0.373936	-2.52865	0.01145	0.196343
Variibacter gotjawalensis	66.9483	-1.44687	0.552016	-2.62107	0.008765	0.196343
Bacillus thuringiensis	408.4663	1.710771	0.617422	2.770831	0.005591	0.196343
Bosea sp. RAC05	202.3757	-1.20094	0.479803	-2.503	0.012315	0.196343
Variovorax sp. PMC12	783.9175	-1.29925	0.51974	-2.4998	0.012426	0.196343
Herbaspirillum hiltneri	195.0951	-1.34192	0.49114	-2.73226	0.00629	0.196343
Vogesella sp. LIG4	95.51681	-1.37031	0.488781	-2.80353	0.005055	0.196343
Bdellovibrio bacteriovorus	18.19114	-1.76293	0.619738	-2.84464	0.004446	0.196343
Mesorhizobium australicum	109.2947	-1.33432	0.452162	-2.95098	0.003168	0.196343
Xanthomonas citri	160.7346	-1.49156	0.567915	-2.62638	0.00863	0.196343
Ralstonia insidiosa	34006.42	-1.28877	0.511972	-2.51726	0.011827	0.196343
Bordetella genomosp. 9	99.07822	-1.28225	0.516904	-2.48063	0.013115	0.196399
Pandoraea pnomenus	457.4967	-1.30144	0.524964	-2.4791	0.013171	0.196436
Flammeovirgaceae bacterium 311	11.29662	-2.04949	0.830815	-2.46685	0.013631	0.196828
Novosphingobium tardaugens	40.0335	-1.51988	0.614828	-2.47204	0.013434	0.196828
Ralstonia pseudosolanacearum	1307.526	-1.52992	0.617724	-2.4767	0.01326	0.196828
Paenibacillus mucilaginosus	42.92562	-1.61344	0.653374	-2.4694	0.013534	0.196828
Comamonas kerstersii	140.8728	-1.12137	0.453436	-2.47305	0.013396	0.196828
Variovorax sp. PAMC 28711	477.8652	-1.37295	0.556529	-2.46699	0.013625	0.196828

Laribacter hongkongensis	72.32607	-1.14238	0.463195	-2.46631	0.013651	0.196828
Candidatus Accumulibacter phosphat	98.84152	-1.28656	0.521839	-2.46544	0.013684	0.196828
Magnetospirillum sp. ME-1	45.13294	-1.30371	0.52775	-2.47031	0.0135	0.196828
Fluviicola taffensis	10.44445	-2.32761	0.948142	-2.45492	0.014092	0.197584
Rhizobacter gummiphilus	635.6745	-1.25721	0.51093	-2.46063	0.013869	0.197584
Methylobacterium sp. DM1	106.4633	-0.88674	0.36079	-2.45777	0.01398	0.197584
Bordetella sp. H567	111.598	-1.14131	0.466009	-2.44912	0.01432	0.197584
Streptomyces sp. CdTB01	98.73597	-1.0769	0.439436	-2.45063	0.014261	0.197584
Bordetella genomosp. 8	107.2699	-1.48642	0.604748	-2.45791	0.013975	0.197584
Niabella soli	50.39957	-1.72828	0.704378	-2.45362	0.014143	0.197584
Chondromyces crocatus	157.1191	-1.2391	0.503228	-2.4623	0.013805	0.197584
Opitutaceae bacterium TAV5	41.03438	-1.39786	0.57078	-2.44903	0.014324	0.197584
Paraburkholderia caledonica	822.5195	-1.30297	0.532091	-2.44878	0.014334	0.197584
Paenibacillus lentus	8.076414	-2.21951	0.906282	-2.44903	0.014324	0.197584
Methylobacterium nodulans	177.6302	-1.0607	0.433593	-2.44631	0.014433	0.19819
Gibbsiella quercinecans	36.95672	-1.43357	0.587465	-2.44027	0.014676	0.198812
Cupriavidus basilensis	921.8826	-1.30855	0.535887	-2.44184	0.014612	0.198812
Pseudorhodoplanes sinuspersici	80.24367	-1.21164	0.498316	-2.43147	0.015038	0.198812
Turneriella parva	11.45061	-2.05169	0.841585	-2.43789	0.014773	0.198812
Lysobacter sp. TY2-98	99.51492	-1.44371	0.59348	-2.43262	0.01499	0.198812
Granulibacter thesedensis	55.69695	-1.06865	0.438209	-2.43868	0.014741	0.198812
Serpentinomonas raichei	159.3291	-1.30642	0.537164	-2.43208	0.015013	0.198812
Rubrivivax gelatinosus	892.5631	-1.24384	0.510754	-2.43531	0.014879	0.198812
Bordetella holmesii	36.26807	-1.33958	0.549257	-2.43889	0.014732	0.198812
Methylocystis rosea	25.11555	-1.71369	0.705082	-2.43048	0.015079	0.198812
Herbaspirillum robiniae	313.6006	-1.20622	0.495185	-2.43589	0.014855	0.198812
Spiribacter curvatus	10.55038	-2.10457	0.866697	-2.42827	0.015171	0.199305
Acaryochloris marina	17.17174	-2.31005	0.952262	-2.42586	0.015272	0.199911
Rubinisphaera brasiliensis	12.27126	-2.0772	0.86127	-2.41178	0.015875	0.202292
Granulicella tundricola	38.61704	-1.41282	0.586031	-2.41083	0.015916	0.202292
Mycoplasma mycoides	11.69433	3.515472	1.466213	2.397654	0.0165	0.202292
Tsukamurella tyrosinosolvens	312.9574	-0.97728	0.405718	-2.40876	0.016007	0.202292
Thermaerobacter marianensis	74.04929	-1.09508	0.453653	-2.41391	0.015782	0.202292
Streptomyces sp. fd1-xmd	88.29179	-1.18403	0.495045	-2.39176	0.016768	0.202292
Hydrogenophaga crassostreae	271.8213	-1.26423	0.525751	-2.40462	0.016189	0.202292
Halomonas sp. SF2003	34.25502	-1.60146	0.668175	-2.39677	0.01654	0.202292
Micavibrio aeruginosavorus	13.32489	-2.36073	0.986411	-2.39325	0.0167	0.202292
Acetobacter ascendens	12.16727	-2.43305	1.019783	-2.38585	0.01704	0.202292
Streptomyces sp. Sge12	38.12095	-2.09667	0.878112	-2.38771	0.016954	0.202292
Cupriavidus pinatubonensis	587.6781	-1.16552	0.484356	-2.40634	0.016113	0.202292
Flavonifractor plautii	140.3928	-1.56587	0.649592	-2.41054	0.015929	0.202292
Roseateles depolymerans	727.0714	-1.18944	0.495276	-2.40158	0.016325	0.202292
Terriglobus roseus	92.70462	-1.13419	0.474881	-2.38836	0.016924	0.202292
Deinococcus irradiatisoli	62.38054	-1.24201	0.517746	-2.39889	0.016445	0.202292
Burkholderia stagnalis	458.7818	-1.37518	0.569792	-2.41347	0.015801	0.202292
Acidiferrobacter sp. SPIII_3	34.66599	-1.3561	0.568654	-2.38476	0.01709	0.202292
Bradyrhizobium sp. CCGE-LA001	303.4097	-1.33718	0.553912	-2.41406	0.015776	0.202292
Melaminivora sp. SC2-7	430.5107	-1.30206	0.543156	-2.39721	0.01652	0.202292
Halomonas aestuarii	34.76262	-1.49054	0.62191	-2.39671	0.016543	0.202292
Haloplanus aerogenes	23.81198	-2.21642	0.928843	-2.38621	0.017023	0.202292

<i>Sulfuricaulis limicola</i>	39.39975	-1.35973	0.567895	-2.39433	0.016651	0.202292
<i>Methanoculleus marisnigri</i>	13.60425	-2.31261	0.970022	-2.38408	0.017122	0.202292
<i>Prosthecochloris</i> sp. GSB1	10.62406	-2.45337	1.023023	-2.39815	0.016478	0.202292
<i>Burkholderia</i> sp. LA-2-3-30-S1-D2	112.5363	-1.35791	0.566951	-2.39511	0.016615	0.202292
<i>Myxococcus stipitatus</i>	83.9556	-1.3199	0.552116	-2.39061	0.01682	0.202292
<i>Burkholderia cepacia</i>	1600.831	-1.27235	0.529857	-2.4013	0.016337	0.202292
<i>Burkholderia</i> sp. OLGA172	2247.943	-1.28067	0.5352	-2.39288	0.016717	0.202292
<i>Meiothermus ruber</i>	42.76638	-1.36185	0.568575	-2.39519	0.016612	0.202292
<i>Symbiobacterium thermophilum</i>	79.65952	-1.3765	0.577803	-2.38229	0.017205	0.20262
<i>Massilia oculi</i>	545.1598	-1.22347	0.517694	-2.36331	0.018112	0.202794
<i>Stenotrophomonas</i> sp. ZAC14D2_NAI	24.89313	-2.74758	1.165615	-2.35719	0.018414	0.202794
<i>Rhizobium favelukesii</i>	60.84777	-1.52434	0.64236	-2.37303	0.017643	0.202794
<i>Allochromatium vinosum</i>	54.25316	-1.20139	0.507746	-2.36613	0.017975	0.202794
[<i>Pseudomonas</i>] <i>mesoacidophila</i>	366.3604	-1.32274	0.561459	-2.3559	0.018478	0.202794
<i>Caldisphaera lagunensis</i>	3.200222	5.708873	2.414693	2.364224	0.018068	0.202794
<i>Komagataeibacter saccharivorans</i>	16.95182	-2.22765	0.939903	-2.37009	0.017784	0.202794
<i>Paraburkholderia</i> sp. SOS3	896.3952	-1.32098	0.559599	-2.36059	0.018246	0.202794
<i>Aeromonas</i> sp. CA23	23.10963	-1.69039	0.716875	-2.358	0.018374	0.202794
<i>Ensifer sojae</i>	53.27381	-1.56081	0.660339	-2.36364	0.018096	0.202794
<i>Geobacter anodireducens</i>	14.57521	-2.06471	0.875236	-2.35904	0.018322	0.202794
<i>Paraburkholderia caffeinilytica</i>	1408.339	-1.29361	0.547206	-2.36403	0.018077	0.202794
<i>Brachyspira pilosicoli</i>	20.42504	2.281033	0.968418	2.355423	0.018502	0.202794
<i>Candidatus Solibacter usitatus</i>	72.20712	-1.17658	0.498647	-2.35955	0.018297	0.202794
<i>Acidovorax cattleyae</i>	307.7678	-1.33006	0.559122	-2.37884	0.017367	0.202794
<i>Rhodoferax ferrireducens</i>	238.1661	-1.27238	0.53884	-2.36134	0.018209	0.202794
<i>Arcobacter skirrowii</i>	6.906604	4.352584	1.834955	2.372039	0.01769	0.202794
<i>Acidithiobacillus ferrooxidans</i>	11.79577	-2.27788	0.966027	-2.35799	0.018374	0.202794
<i>Hydrogenophaga</i> sp. RAC07	538.9125	-1.16306	0.492589	-2.36112	0.01822	0.202794
<i>Nocardiopsis alba</i>	93.10457	-0.8891	0.374926	-2.3714	0.017721	0.202794
<i>Burkholderia latens</i>	91.47003	-1.84321	0.781502	-2.35855	0.018346	0.202794
<i>Bradyrhizobium japonicum</i>	561.6976	-1.2269	0.518545	-2.36603	0.01798	0.202794
<i>Methanobrevibacter millerae</i>	4.577509	4.715655	1.989541	2.370223	0.017777	0.202794
<i>Streptomyces</i> sp. CMB-StM0423	75.64777	-1.38736	0.58964	-2.35289	0.018628	0.202956
<i>Dyadobacter fermentans</i>	41.77275	-1.36773	0.581105	-2.35366	0.018589	0.202956
<i>Leuconostoc lactis</i>	8.483363	-4.15686	1.768478	-2.35053	0.018747	0.203641
<i>Stenotrophomonas</i> sp. SAU14A_NAIM	103.0302	-1.40888	0.600373	-2.34668	0.018941	0.203722
<i>Pandoraea oxalativorans</i>	159.694	-1.36717	0.582173	-2.3484	0.018854	0.203722
<i>Pseudomonas</i> sp. K2W31S-8	76.13582	-1.18352	0.504495	-2.34596	0.018978	0.203722
<i>Vulgatibacter incomptus</i>	92.70183	-1.36437	0.581285	-2.34716	0.018917	0.203722
<i>Marinobacterium aestuarii</i>	32.02492	-1.42719	0.612372	-2.33059	0.019775	0.204157
<i>Spiroplasma diminutum</i>	5.144539	5.815593	2.488535	2.336955	0.019442	0.204157
<i>Halobiforma lacisalsi</i>	13.41586	-1.60807	0.689792	-2.33124	0.019741	0.204157
<i>Pandoraea norimbergensis</i>	215.7293	-1.25139	0.536348	-2.33316	0.01964	0.204157
<i>Alicyclophilus denitrificans</i>	1485.121	-1.18972	0.510265	-2.33157	0.019723	0.204157
<i>Bosea</i> sp. PAMC 26642	126.1238	-1.14966	0.492794	-2.33295	0.019651	0.204157
<i>Acidovorax avenae</i>	1126.936	-1.27986	0.547823	-2.33626	0.019478	0.204157
<i>Myxococcus hansupus</i>	83.00739	-1.28108	0.54952	-2.33128	0.019739	0.204157
<i>Fusobacterium varium</i>	36.61048	1.412095	0.60604	2.330037	0.019804	0.204157
<i>Streptomyces bingchenggensis</i>	119.8143	-1.07916	0.460452	-2.3437	0.019094	0.204157
<i>Frankia casuarinae</i>	46.0501	-1.19787	0.51174	-2.34078	0.019243	0.204157

<i>Desulfurivibrio alkaliphilus</i>	17.08433	-1.9051	0.816943	-2.33198	0.019702	0.204157
<i>Streptomyces niveus</i>	143.765	-1.10662	0.472943	-2.33986	0.019291	0.204157
<i>Massilia violaceinigra</i>	214.8186	-1.10891	0.474167	-2.33865	0.019353	0.204157
<i>Bradyrhizobium oligotrophicum</i>	211.7548	-1.15966	0.498163	-2.32787	0.019919	0.204184
<i>Pseudomonas citronellolis</i>	186.3447	-0.99809	0.428657	-2.32841	0.01989	0.204184
<i>Rhodospirillum centenum</i>	87.50121	-1.22613	0.527862	-2.32282	0.020189	0.204793
<i>Streptomyces albireticuli</i>	102.0943	-0.95925	0.413017	-2.32255	0.020204	0.204793
<i>Hyphomonas</i> sp. Mor2	18.84229	-2.01654	0.867317	-2.32504	0.02007	0.204793
<i>Bradyrhizobium</i> sp. 2 39S1MB	213.4903	-1.27725	0.549916	-2.32262	0.0202	0.204793
<i>Pseudoflavitalea</i> sp. 5GH32-13	85.21835	-1.09877	0.473898	-2.31857	0.020418	0.205672
<i>Marinobacter</i> sp. LQ44	15.00942	-1.64446	0.709176	-2.31884	0.020404	0.205672
<i>Acidisphaera</i> sp. G45-3	68.75947	-1.23907	0.534587	-2.31781	0.02046	0.205672
<i>Bordetella avium</i>	52.90601	-1.30097	0.576447	-2.25687	0.024016	0.207049
<i>Burkholderia pyrrocinia</i>	491.8471	-1.26383	0.549408	-2.30034	0.021429	0.207049
<i>Burkholderia diffusa</i>	154.9107	-1.39859	0.621253	-2.25124	0.02437	0.207049
<i>Dyella jiangningensis</i>	95.54478	-1.18005	0.513527	-2.29793	0.021566	0.207049
<i>Streptomyces</i> sp. TLI_053	89.22485	-0.92391	0.406807	-2.27112	0.023139	0.207049
<i>Pseudomonas</i> sp. UW4	44.155	-1.36808	0.596146	-2.29488	0.02174	0.207049
<i>Halanaeroarchaeum sulfurireducens</i>	7.345483	-2.55	1.118746	-2.27933	0.022647	0.207049
<i>Sandaracinus amyolyticus</i>	189.9124	-1.04098	0.456313	-2.28128	0.022532	0.207049
<i>Niastella koreensis</i>	147.1089	-1.22531	0.541976	-2.26082	0.023771	0.207049
<i>Paraburkholderia rhizoxinica</i>	120.9353	-1.37083	0.609761	-2.24814	0.024567	0.207049
<i>Streptomyces spongiicola</i>	48.2067	-1.11222	0.488226	-2.27808	0.022722	0.207049
<i>Cupriavidus oxalaticus</i>	434.609	-1.15679	0.514664	-2.24766	0.024598	0.207049
<i>Pseudomonas</i> sp. S-6-2	24.86022	-1.45961	0.639922	-2.28091	0.022554	0.207049
<i>Paraburkholderia fungorum</i>	4662.431	-1.30712	0.579675	-2.25492	0.024138	0.207049
<i>Pandoraea apista</i>	182.6276	-1.07912	0.48022	-2.24714	0.024631	0.207049
<i>Tistrella mobilis</i>	138.577	-1.2071	0.527561	-2.28807	0.022134	0.207049
<i>Vibrio tritonius</i>	5.493461	-3.45237	1.515487	-2.27806	0.022723	0.207049
<i>Pseudomonas xinjiangensis</i>	21.58523	-1.32009	0.571588	-2.3095	0.020916	0.207049
<i>Streptomyces</i> sp. Z022	69.60653	-1.19521	0.523767	-2.28195	0.022492	0.207049
<i>Methyloburium extorquens</i>	351.4212	-0.82498	0.364623	-2.26255	0.023663	0.207049
<i>Azospirillum</i> sp. TSH58	106.3105	-1.28316	0.572437	-2.24157	0.024989	0.207049
<i>Clostridium perfringens</i>	93.05474	1.087757	0.483845	2.248152	0.024566	0.207049
<i>gamma proteobacterium HdN1</i>	17.99443	-1.52144	0.671886	-2.26443	0.023548	0.207049
<i>Acidovorax carolinensis</i>	874.9685	-1.20444	0.537329	-2.24153	0.024992	0.207049
<i>Pseudomonas cedrina</i>	62.03114	-1.31282	0.569292	-2.30606	0.021107	0.207049
<i>Phycisphaera mikurensis</i>	56.21903	-1.32056	0.570884	-2.31319	0.020712	0.207049
<i>Dokdonella koreensis</i>	227.9516	-1.2239	0.538304	-2.27362	0.022989	0.207049
<i>Actinoplanes friuliensis</i>	163.6303	-1.00946	0.448933	-2.24857	0.02454	0.207049
<i>Blastochloris viridis</i>	81.45372	-1.31423	0.575012	-2.28557	0.022279	0.207049
<i>Klebsiella quasipneumoniae</i>	26.00474	-2.88798	1.272666	-2.26924	0.023254	0.207049
<i>Gordonia terrae</i>	446.0852	-1.14564	0.510345	-2.24483	0.024779	0.207049
<i>Bordetella petrii</i>	194.2214	-1.24826	0.541911	-2.30344	0.021254	0.207049
<i>Variovorax paradoxus</i>	2160.775	-1.10443	0.486914	-2.26822	0.023316	0.207049
<i>Synechococcus</i> sp. KORDI-52	12.75959	-2.57546	1.138921	-2.26132	0.02374	0.207049
<i>Halomonas elongata</i>	36.63961	-1.17173	0.514515	-2.27734	0.022766	0.207049
<i>Thiomonas</i> sp. X19	164.4631	-1.30196	0.570676	-2.28144	0.022522	0.207049
<i>Cupriavidus taiwanensis</i>	2661.351	-1.14565	0.504767	-2.26965	0.023229	0.207049
<i>Frankineae bacterium MT45</i>	72.29022	-0.95977	0.426573	-2.24995	0.024452	0.207049

Magnetospira sp. QH-2	21.54949	-1.32597	0.584928	-2.26689	0.023397	0.207049
Microbulbifer thermotolerans	10.06234	-1.73026	0.767933	-2.25314	0.02425	0.207049
Rubrobacter indicoceani	29.28155	-1.5244	0.673058	-2.26489	0.02352	0.207049
Clostridium kluyveri	49.92195	1.590392	0.696327	2.283972	0.022373	0.207049
Gemmata obscuriglobus	77.84845	-1.26214	0.557029	-2.26584	0.023461	0.207049
Planococcus sp. PAMC 21323	12.47075	-2.50195	1.105961	-2.26224	0.023683	0.207049
Blastomonas fulva	40.86759	-2.00232	0.892355	-2.24386	0.024841	0.207049
Devosia sp. I507	42.61403	-1.5554	0.673716	-2.30868	0.020961	0.207049
Streptomyces glaucescens	60.41927	-1.06671	0.469389	-2.27256	0.023053	0.207049
Gluconacetobacter diazotrophicus	79.87048	-1.16249	0.516166	-2.25217	0.024312	0.207049
Verminephrobacter eiseniae	478.1433	-1.2803	0.558737	-2.29142	0.021939	0.207049
Burkholderiales bacterium JOSHI_001	615.5616	-1.18443	0.518698	-2.28347	0.022403	0.207049
Rhodoplanes sp. Z2-YC6860	158.9039	-1.14249	0.508234	-2.24797	0.024578	0.207049
Cupriavidus metallidurans	1025.429	-1.28131	0.5542	-2.31199	0.020778	0.207049
Methylocystis sp. SC2	27.23241	-1.52642	0.662891	-2.30267	0.021297	0.207049
Pseudomonas brenneri	35.91105	-1.34936	0.600479	-2.24714	0.024631	0.207049
Streptomyces dengpaensis	64.87857	-1.27882	0.560374	-2.28209	0.022484	0.207049
Mycolicibacterium vaccae	241.5921	-0.99088	0.438341	-2.26052	0.023789	0.207049
Azoarcus sp. CIB	98.07296	-1.32566	0.588647	-2.25205	0.024319	0.207049
Burkholderia sp. CCGE1002	995.4892	-1.24921	0.540537	-2.31106	0.02083	0.207049
Staphylococcus kloosii	108.7361	1.333606	0.594879	2.241811	0.024974	0.207049
Burkholderia gladioli	1218.353	-1.17298	0.518937	-2.26035	0.023799	0.207049
Thioflavococcus mobilis	38.09932	-1.12509	0.500035	-2.25002	0.024448	0.207049
Sulfuricella denitrificans	41.94941	-1.21972	0.53713	-2.27081	0.023159	0.207049
Nitrosospira briensis	5.311836	-2.81338	1.220311	-2.30546	0.021141	0.207049
Dyella japonica	138.7635	-1.11279	0.484147	-2.29845	0.021536	0.207049
Nitratireductor sp. OM-1	43.59432	-1.36691	0.600849	-2.27497	0.022908	0.207049
Ketobacter alkanivorans	7.076831	-2.79016	1.237851	-2.25404	0.024194	0.207049
Paraburkholderia aromaticivorans	1501.028	-1.28671	0.574203	-2.24087	0.025035	0.207049
Azospirillum brasilense	286.403	-1.25411	0.553107	-2.26739	0.023367	0.207049
Nitrospira japonica	25.01463	-1.49415	0.653947	-2.28482	0.022323	0.207049
Fuerstia marisgermanicae	14.94313	-1.7711	0.788822	-2.24525	0.024752	0.207049
Herbaspirillum sp. meg3	118.6768	-1.34741	0.590625	-2.28132	0.022529	0.207049
Croceicoccus marinus	67.61156	-0.96149	0.419203	-2.29362	0.021813	0.207049
Klebsiella michiganensis	46.22921	-1.71237	0.748262	-2.28847	0.02211	0.207049
Pseudomonas sp. MT-1	24.8451	-1.74812	0.778618	-2.24515	0.024758	0.207049
Vitreoscilla filiformis	132.945	-1.08561	0.475794	-2.28169	0.022508	0.207049
Arachidococcus sp. KIS59-12	53.90642	-1.36371	0.599962	-2.273	0.023026	0.207049
Clostridium butyricum	46.29946	1.527253	0.678369	2.251361	0.024363	0.207049
Pseudomonas sp. M30-35	16.04039	-1.45676	0.64711	-2.25118	0.024374	0.207049
Chitinophaga sp. MD30	39.16005	-1.32676	0.593686	-2.23478	0.025432	0.207701
Advenella mimigardefordensis	23.49383	-1.4026	0.62712	-2.23657	0.025314	0.207701
Xanthomonas vesicatoria	41.28131	-1.30469	0.583791	-2.23486	0.025426	0.207701
Paraburkholderia xenovorans	1579.447	-1.16082	0.519192	-2.23582	0.025364	0.207701
Variovorax sp. HW608	815.9538	-1.1465	0.512794	-2.23578	0.025366	0.207701
Streptomyces roseochromogenus	62.8318	-1.02467	0.458586	-2.23441	0.025456	0.207701
Ferriphaseelus amnicola	38.47835	-1.29158	0.579321	-2.22947	0.025783	0.209895
Mycobacterium paragordonae	202.2399	-0.8754	0.393076	-2.22705	0.025944	0.210716
Paraburkholderia terricola	1155.138	-1.21166	0.544266	-2.22622	0.025999	0.210716
Pseudonocardia sp. HH130629-09	218.6384	-0.99206	0.445912	-2.22479	0.026096	0.211026

<i>Paraburkholderia caribensis</i>	1432.258	-1.14455	0.514793	-2.22332	0.026194	0.211148
<i>Enterococcus casseliflavus</i>	12.2771	-3.12669	1.407654	-2.22121	0.026337	0.211148
<i>Gloeobacter violaceus</i>	74.51494	-1.14632	0.5161	-2.22112	0.026343	0.211148
<i>Pandoraea sputorum</i>	150.0011	-1.3528	0.608616	-2.22275	0.026233	0.211148
<i>Polaromonas</i> sp. JS666	506.7319	-1.21965	0.549332	-2.22025	0.026402	0.211159
<i>Dyella thiooxydans</i>	170.3471	-1.13883	0.513751	-2.21669	0.026644	0.212057
<i>Nocardiopsis dassonvillei</i>	178.7999	-0.91683	0.413727	-2.21603	0.026689	0.212057
<i>Moorella thermoacetica</i>	24.06321	-1.42302	0.642075	-2.21629	0.026672	0.212057
<i>Rhodopseudomonas palustris</i>	1080.474	-0.98865	0.446584	-2.2138	0.026842	0.212346
<i>Conexibacter woesei</i>	203.52	-1.04625	0.472426	-2.21462	0.026786	0.212346
<i>Tsukamurella paurometabola</i>	158.2708	-0.89855	0.40666	-2.20958	0.027135	0.214193
<i>Burkholderia ambifaria</i>	357.9768	-1.25813	0.570271	-2.20621	0.02737	0.214252
<i>Pseudomonas</i> sp. GR 6-02	12.22931	-2.70062	1.222985	-2.20822	0.027229	0.214252
<i>Pseudomonas</i> sp. CC6-YY-74	36.8397	-1.2552	0.568589	-2.20757	0.027274	0.214252
<i>Mycobacterium</i> sp. EPa45	131.876	-1.09187	0.494936	-2.20609	0.027378	0.214252
<i>Rhizobium</i> sp. N324	6.643865	-4.82893	2.190432	-2.20456	0.027485	0.214633
<i>Nonlabens spongiae</i>	10.88234	-2.02242	0.917913	-2.20328	0.027575	0.214805
<i>Streptomyces albus</i>	94.05979	-0.91791	0.416748	-2.20257	0.027625	0.214805
<i>Neisseria meningitidis</i>	396.882	-1.42425	0.647363	-2.20007	0.027802	0.215714
<i>Marichromatium purpuratum</i>	61.30216	-1.00385	0.456696	-2.19807	0.027944	0.216357
<i>Mitsuaria</i> sp. 7	1177.453	-1.09457	0.499454	-2.19152	0.028414	0.217565
<i>Bradyrhizobium</i> sp.	284.1972	-1.16957	0.534433	-2.18843	0.028638	0.217565
<i>Halomonas beimenensis</i>	93.99516	-1.22456	0.558484	-2.19266	0.028332	0.217565
<i>Spiroplasma corruscae</i>	5.516335	4.647944	2.122794	2.189541	0.028558	0.217565
[<i>Polyangium</i>] <i>brachysporum</i>	420.1768	-1.20371	0.549846	-2.18917	0.028584	0.217565
<i>Simplicispira suum</i>	401.5206	-1.08327	0.494885	-2.18894	0.028601	0.217565
<i>Methylomonas methanica</i>	9.418541	-2.63202	1.200651	-2.19216	0.028368	0.217565
<i>Ottowia</i> sp. oral taxon 894	118.6465	-1.16531	0.530974	-2.19467	0.028187	0.217565
<i>Kushneria konosiri</i>	26.15004	-1.25064	0.571426	-2.18862	0.028624	0.217565
<i>Burkholderia</i> sp. CCGE1003	791.1143	-1.25826	0.575288	-2.18718	0.028729	0.217577
<i>Sinorhizobium medicae</i>	37.16478	-1.41755	0.648425	-2.18615	0.028805	0.217577
<i>Desulfovibrio</i> sp. FW1012B	41.8837	-1.22765	0.562426	-2.18278	0.029052	0.217577
<i>Pseudonocardia</i> sp. AL041005-10	268.1204	-0.82524	0.377575	-2.18563	0.028842	0.217577
<i>Pseudomonas</i> sp. DY-1	60.12014	-1.42285	0.651563	-2.18375	0.028981	0.217577
<i>Pseudogulbenkiania</i> sp. NH8B	106.4323	-1.0661	0.488432	-2.1827	0.029058	0.217577
<i>Roseomonas gilardii</i>	244.4759	-1.09708	0.50239	-2.18371	0.028983	0.217577
<i>Pseudomonas</i> sp. LTJR-52	39.49161	-1.37652	0.631514	-2.17972	0.029278	0.218328
<i>Mycobacterium shigaense</i>	107.4006	-0.9245	0.424069	-2.18006	0.029253	0.218328
<i>Burkholderia</i> sp. PAMC 26561	360.7089	-1.27965	0.588253	-2.17533	0.029605	0.218786
<i>Rhodoferax koreense</i>	952.406	-1.18646	0.54516	-2.17635	0.029529	0.218786
<i>Paraburkholderia phymatum</i>	921.1521	-1.20986	0.556619	-2.17358	0.029737	0.218786
<i>Pseudomonas furukawaii</i>	74.31384	-1.09008	0.502323	-2.17007	0.030001	0.218786
<i>Leadbetterella byssophila</i>	8.171851	-1.9925	0.918088	-2.17027	0.029986	0.218786
<i>Agrobacterium rhizogenes</i>	49.09142	-1.36312	0.625855	-2.17801	0.029406	0.218786
<i>Epibacterium mobile</i>	20.51283	-1.38612	0.638401	-2.17123	0.029914	0.218786
<i>Martelella mediterranea</i>	70.01041	-1.2617	0.58049	-2.17351	0.029742	0.218786
<i>Massilia</i> sp. NR 4-1	224.8197	-1.02108	0.469003	-2.17713	0.029471	0.218786
<i>Burkholderia</i> sp. BDU8	137.0898	-1.39596	0.642336	-2.17325	0.029762	0.218786
<i>Filimonas lacunae</i>	99.34572	-1.16196	0.535349	-2.17047	0.029971	0.218786
<i>Curvibacter</i> sp. AEP1-3	197.2597	-1.13703	0.524992	-2.16581	0.030326	0.218985

Porphyr bacter sp. CACIAM 03H1	52.88924	-1.14151	0.528216	-2.16106	0.03069	0.218985
Oxalobacter formigenes	11.03401	-1.91277	0.88419	-2.1633	0.030518	0.218985
Serratia rubidaea	23.11728	-2.14959	0.991558	-2.1679	0.030167	0.218985
Brevibacterium siliguriense	251.8477	-1.0039	0.463157	-2.16751	0.030196	0.218985
Sodalis glossinidius	9.535456	-2.0307	0.938719	-2.16327	0.03052	0.218985
Stappia sp. ES.058	50.63894	-1.06851	0.493379	-2.16569	0.030335	0.218985
Azoarcus sp. BH72	60.55231	-2.10991	0.975983	-2.16183	0.030632	0.218985
Burkholderia sp. YI23	232.2497	-1.31852	0.610036	-2.16138	0.030666	0.218985
Mycolicibacterium rhodesiae	142.1426	-0.89997	0.416217	-2.16225	0.030599	0.218985
Bifidobacterium scardovii	44.67497	-0.90464	0.417692	-2.1658	0.030327	0.218985
Bradyrhizobium ottawaense	705.1545	-1.14039	0.527931	-2.16011	0.030764	0.219082
Frankia inefficax	120.9766	-1.04994	0.48646	-2.15833	0.030902	0.219637
Bosea vaviloviae	158.6424	-1.15156	0.533924	-2.15679	0.031022	0.219732
Actinoplanes derwentensis	158.0644	-0.84365	0.391194	-2.1566	0.031037	0.219732
Cyanobium gracile	54.66859	-1.06875	0.496019	-2.15465	0.031189	0.220383
Methanosaeta harundinacea	4.251252	-3.37834	1.56913	-2.153	0.031319	0.22044
Ahniella affigens	17.93602	-1.359	0.631735	-2.15123	0.031458	0.22044
Lysobacter maris	109.1053	-1.07897	0.501684	-2.1507	0.0315	0.22044
Serpentinomonas mccroryi	202.1545	-1.05566	0.490616	-2.15169	0.031422	0.22044
Propionibacterium freudenreichii	480.2236	-0.8299	0.385444	-2.1531	0.031311	0.22044
Pseudomonas knackmussii	126.708	-0.99629	0.464528	-2.14473	0.031974	0.220786
Bosea sp. AS-1	166.4367	-1.07156	0.499414	-2.14563	0.031902	0.220786
Methylobacillus flagellatus	15.28666	-1.5215	0.708304	-2.14809	0.031707	0.220786
Yangia pacifica	77.55608	-1.05126	0.490091	-2.14502	0.031951	0.220786
Microbulbifer sp. A4B17	9.880218	-1.66382	0.775412	-2.14572	0.031895	0.220786
Serratia sp. FDAARGOS_506	9.014885	-3.16417	1.475276	-2.1448	0.031969	0.220786
Streptomyces reticuli	66.62839	-1.17346	0.546426	-2.14753	0.031751	0.220786
Burkholderia sp. Bp7605	283.5671	-1.13564	0.529694	-2.14396	0.032036	0.220796
Bacillus glycinifermentans	13.85688	-2.0228	0.94394	-2.14293	0.032119	0.220946
Pseudarthrobacter chlorophenolicus	128.6262	-0.79499	0.371332	-2.14093	0.03228	0.221635
Cedecea neteri	48.42009	-1.12856	0.527909	-2.1378	0.032533	0.222954
Methylibium petroleiphilum	721.4686	-1.16035	0.543339	-2.13559	0.032712	0.223359
Azotobacter chroococcum	123.5132	-1.12838	0.528374	-2.13556	0.032715	0.223359
Rhizobium sp. ACO-34A	71.30616	-1.04642	0.490202	-2.13467	0.032788	0.223435
Geobacter sp. DSM 9736	16.26264	-1.79071	0.841416	-2.12822	0.033319	0.224119
Pelodictyon luteolum	11.24908	-1.82403	0.855906	-2.13111	0.03308	0.224119
Mesorhizobium opportunistum	108.2081	-1.16607	0.547531	-2.12969	0.033198	0.224119
Luteibacter rhizovicius	84.45217	-0.94394	0.443163	-2.13	0.033171	0.224119
Pseudomonas resinovorans	133.9931	-1.16943	0.54939	-2.1286	0.033287	0.224119
Thauera humireducens	101.6069	-1.23789	0.581333	-2.12941	0.033221	0.224119
Xanthomonas arboricola	33.08294	-1.42246	0.668293	-2.12849	0.033296	0.224119
Paraburkholderia phytofirmans	3818.717	-1.16929	0.54984	-2.1266	0.033453	0.224604
Lysobacter enzymogenes	265.9291	-0.95679	0.450103	-2.12572	0.033526	0.224682
Burkholderia sp. JP2-270	214.435	-1.15583	0.544537	-2.1226	0.033788	0.224778
Delftia acidovorans	645.0632	-1.30553	0.614701	-2.12385	0.033683	0.224778
Shewanella loihica	21.78584	-1.25475	0.590557	-2.12469	0.033612	0.224778
Streptomyces pratensis	21.91969	-3.02354	1.424157	-2.12304	0.033751	0.224778
Breoghanian sp. L-A4	59.97377	-1.35435	0.638998	-2.11948	0.03405	0.226107
Atopobium parvulum	154.3651	-1.33642	0.6313	-2.11693	0.034266	0.22621
Elizabethkingia miricola	6.285831	-3.71969	1.757861	-2.11603	0.034342	0.22621

<i>Burkholderia pseudomallei</i>	2155.782	-1.25447	0.592387	-2.11765	0.034205	0.22621
<i>Mesorhizobium oceanicum</i>	79.34601	-0.94463	0.4465	-2.11563	0.034376	0.22621
<i>Rhodovulum</i> sp. P5	51.04714	-1.16542	0.550281	-2.11787	0.034186	0.22621
<i>Frateuria aurantia</i>	54.34894	-1.14994	0.544106	-2.11345	0.034562	0.226966
<i>Streptomyces cyaneogriseus</i>	43.2256	-1.56561	0.741103	-2.11254	0.03464	0.226966
<i>Desulfobulbus</i> sp. ORNL	38.73754	-1.16258	0.550438	-2.1121	0.034678	0.226966
<i>Burkholderia plantarii</i>	577.506	-1.1521	0.546565	-2.10789	0.035041	0.228929
<i>Bernardetia litoralis</i>	21.53614	1.500661	0.712719	2.105544	0.035244	0.229844
<i>Anaeromyxobacter dehalogenans</i>	152.5812	-1.06349	0.50534	-2.10451	0.035334	0.230017
<i>Janibacter indicus</i>	930.9402	-1.14109	0.542654	-2.1028	0.035483	0.230217
<i>Geobacter bemidjiensis</i>	26.23624	-1.60027	0.761049	-2.10271	0.035491	0.230217
<i>Brachyspira intermedia</i>	12.79653	2.73547	1.302069	2.100863	0.035653	0.230856
<i>Hydrogenophaga</i> sp. PBC	711.0746	-1.12595	0.5373	-2.09557	0.03612	0.231005
<i>Aromatoleum aromaticum</i>	91.06852	-1.12017	0.534435	-2.09599	0.036083	0.231005
<i>Salipiger profundus</i>	95.44949	-1.097	0.522838	-2.09816	0.035891	0.231005
<i>Synechococcus</i> sp. PCC 7336	15.2538	-1.56941	0.748293	-2.09732	0.035965	0.231005
<i>Massilia</i> sp. WG5	477.4718	-1.18905	0.566752	-2.09801	0.035904	0.231005
<i>Paraburkholderia phenoliruptrix</i>	951.5109	-1.31062	0.625385	-2.0957	0.036109	0.231005
<i>Aureimonas</i> sp. AU20	92.95594	-1.22047	0.581441	-2.09905	0.035812	0.231005
<i>Chelatococcus</i> sp. CO-6	129.1411	-1.12118	0.53595	-2.09196	0.036442	0.232656
<i>Burkholderia</i> sp. NRF60-BP8	149.2112	-1.21078	0.57973	-2.08852	0.036751	0.233488
<i>Mesorhizobium ciceri</i>	369.3732	-1.09379	0.52359	-2.08902	0.036706	0.233488
<i>Myxococcus macrosporus</i>	164.3908	-1.03841	0.498185	-2.08438	0.037125	0.233488
<i>Fimbriimonas ginsengisoli</i>	32.55406	-1.29783	0.622331	-2.08544	0.03703	0.233488
<i>Nitrosomonas ureae</i>	35.81294	-1.4793	0.709018	-2.08641	0.036941	0.233488
<i>Rhodobaca barguzinensis</i>	16.47096	-1.6726	0.801937	-2.0857	0.037006	0.233488
<i>Mycobacterium marseillense</i>	76.54196	-0.84344	0.404821	-2.08348	0.037207	0.233488
<i>Brenneria goodwinii</i>	13.26664	-1.48973	0.714721	-2.08435	0.037128	0.233488
<i>Sinorhizobium americanum</i>	34.80947	-1.26861	0.608678	-2.08421	0.037141	0.233488
<i>Cupriavidus nantongensis</i>	556.8998	-1.32801	0.637422	-2.0834	0.037214	0.233488
<i>Sphingomonas wittichii</i>	226.7654	-1.01956	0.489842	-2.08142	0.037396	0.23384
<i>Chromobacterium rhizoryzae</i>	68.86433	-0.99904	0.479988	-2.08138	0.037399	0.23384
<i>Citrobacter amalonaticus</i>	30.39007	-2.36014	1.134738	-2.0799	0.037535	0.234289
<i>Bradyrhizobium</i> sp. SK17	565.1861	-1.04453	0.50282	-2.07734	0.03777	0.234935
<i>Kitasatospora albolonga</i>	65.62484	-1.16019	0.558679	-2.07667	0.037832	0.234935
<i>Methylomonas koyamae</i>	4.797689	-3.20679	1.543685	-2.07736	0.037768	0.234935
<i>Marinobacter salarius</i>	21.03759	-1.46485	0.706105	-2.07456	0.038028	0.235746
<i>Streptosporangium roseum</i>	121.6563	-0.7852	0.378981	-2.07186	0.038279	0.236495
<i>Methyloceanibacter</i> sp. wino2	44.47985	-1.11289	0.537027	-2.07232	0.038236	0.236495
<i>Acidovorax citrulli</i>	435.5654	-1.10755	0.536584	-2.06408	0.03901	0.237387
<i>Halioglobus pacificus</i>	13.07153	-2.00849	0.972131	-2.06607	0.038822	0.237387
<i>Comamonas aquatica</i>	420.7361	-1.0108	0.489084	-2.06672	0.038761	0.237387
<i>Serratia proteamaculans</i>	112.7917	1.733449	0.838675	2.06689	0.038745	0.237387
<i>Paenibacillus ihbetae</i>	8.167303	-2.04866	0.99086	-2.06756	0.038681	0.237387
<i>Ramlibacter tataouinensis</i>	1432.045	-1.08327	0.524593	-2.06496	0.038926	0.237387
<i>Streptomyces</i> sp. Mg1	53.94508	-1.26978	0.613999	-2.06805	0.038636	0.237387
<i>Natronobacterium gregoryi</i>	5.850195	-3.22118	1.557061	-2.06876	0.038569	0.237387
<i>Streptomyces albulus</i>	87.61917	-0.81826	0.396328	-2.06459	0.038962	0.237387
<i>Myxococcus fulvus</i>	137.5792	-0.93507	0.453916	-2.06001	0.039398	0.238493
<i>Natronococcus occultus</i>	14.35782	-1.72378	0.837492	-2.05827	0.039564	0.238493

Sinorhizobium fredii	291.1773	-0.93342	0.453314	-2.0591	0.039485	0.238493
Candidatus Thiodictyon syntrophicum	83.65761	-1.0585	0.514256	-2.0583	0.039561	0.238493
Staphylococcus virus Sextaec	347.4298	3.6624	1.777573	2.060337	0.039366	0.238493
Pseudomonas balearica	70.89283	-1.02319	0.497163	-2.05805	0.039585	0.238493
Polaromonas naphthalenivorans	511.0684	-1.05234	0.511849	-2.05595	0.039788	0.238922
Ottowia oryzae	443.7861	-1.1979	0.582641	-2.05599	0.039784	0.238922
Janthinobacterium sp. 1_2014MBL_N	209.4687	-1.10137	0.536462	-2.05303	0.040069	0.239179
Sulfolobus islandicus	5.760535	4.392774	2.139956	2.05274	0.040098	0.239179
Pseudomonas alcaligenes	84.79765	-1.03199	0.502788	-2.05254	0.040117	0.239179
Cryobacterium sp. LW097	105.6044	-1.05771	0.515775	-2.05072	0.040294	0.239179
Pseudomonas savastanoi	14.65847	-2.87331	1.402342	-2.04894	0.040468	0.239179
Mycolicibacterium litorale	121.5805	-0.77024	0.375699	-2.05015	0.04035	0.239179
Ethanoligenens harbinense	26.41157	-1.58659	0.774423	-2.04874	0.040488	0.239179
Paraburkholderia hospita	1056.761	-1.16261	0.566522	-2.05218	0.040152	0.239179
Burkholderia stabilis	619.7888	-1.06871	0.521037	-2.05111	0.040256	0.239179
Rhodococcus sp. PBTS 2	394.3179	1.323119	0.645438	2.049955	0.040369	0.239179
Leptothrix cholodnii	700.4511	-1.12997	0.551827	-2.04768	0.040591	0.239403
Erythrobacter sp. Alg231-14	12.5706	-1.92635	0.941134	-2.04684	0.040673	0.239499
Halomonas sp. KO116	14.49601	-2.31958	1.134028	-2.04544	0.040812	0.239927
Frankia symbiont of Datisca glomerat	80.44359	-0.80764	0.394996	-2.04467	0.040887	0.23998
Streptomyces globisporus	82.752	-1.11973	0.548137	-2.0428	0.041073	0.240681
Chelatococcus daeguensis	86.417	-1.34106	0.657414	-2.0399	0.04136	0.241588
Methanosarcina barkeri	19.46776	2.382938	1.168071	2.040063	0.041344	0.241588
Burkholderia cenocepacia	1991.342	-1.12429	0.551492	-2.03863	0.041487	0.241943
Bradyrhizobium sp. ORS 278	196.7948	-0.96936	0.476132	-2.0359	0.041761	0.243147
Dickeya dianthicola	25.59627	-1.96241	0.966125	-2.03122	0.042233	0.244516
Olsenella sp. GAM18	22.37628	-1.33039	0.655899	-2.02835	0.042524	0.244516
Serratia marcescens	247.4995	-0.84991	0.419033	-2.02826	0.042533	0.244516
Paludisphaera borealis	97.23897	-0.90212	0.444578	-2.02915	0.042443	0.244516
Chlorobium chlorochromatii	4.612109	-2.48388	1.223638	-2.02991	0.042365	0.244516
Synechococcus sp. KORDI-100	5.325063	-2.51171	1.236859	-2.03072	0.042284	0.244516
Actinomyces sp. oral taxon 414	955.4657	-1.1035	0.543996	-2.0285	0.042509	0.244516
Thermomicrobium roseum	12.84396	-1.80652	0.889768	-2.03033	0.042323	0.244516
Staphylococcus sp. AntiMn-1	28.36465	-2.31664	1.143665	-2.02563	0.042803	0.245676
Rhodanobacter denitrificans	179.4494	-1.04294	0.515124	-2.02463	0.042905	0.245876
Sphingomonas sp. MM-1	159.783	-1.10934	0.548436	-2.02274	0.0431	0.245935
Streptomyces sp. NEAU-S7GS2	109.745	-0.91827	0.454233	-2.02158	0.04322	0.245935
Opitutus sp. GAS368	66.98513	-1.09842	0.543626	-2.02055	0.043327	0.245935
Streptococcus pluranimalium	27.95895	-1.707	0.844562	-2.02116	0.043263	0.245935
Castellaniella defragrans	196.1157	-1.10419	0.546642	-2.01995	0.043388	0.245935
Xylella taiwanensis	8.981168	-1.98086	0.979351	-2.02262	0.043112	0.245935
Kurthia sp. 11kri321	17.89909	-2.08602	1.031845	-2.02164	0.043214	0.245935
Streptomyces sp. Tu6071	15.35421	-2.95874	1.466921	-2.01698	0.043698	0.247305
Pontimonas salivibrio	22.95856	-1.21445	0.60237	-2.01612	0.043787	0.247426
Paenibacillus glucanolyticus	19.55473	-1.73013	0.858488	-2.01533	0.04387	0.247511
Leptolyngbya sp. O-77	24.4972	-1.40354	0.697618	-2.0119	0.044231	0.248005
Zobellella denitrificans	63.59105	-1.14332	0.567984	-2.01294	0.04412	0.248005
Salinivirga cyanobacteriivorans	5.799261	-2.81349	1.398272	-2.01212	0.044207	0.248005
Diaphorobacter polyhydroxybutyrati	1064.767	-1.20206	0.597318	-2.01243	0.044175	0.248005
Halomonas sp. JS92-SW72	155.606	-1.1956	0.594563	-2.01089	0.044337	0.248219

Xenorhabdus nematophila	5.423185	-3.33506	1.660084	-2.00897	0.04454	0.248975
Thermogutta terrifontis	6.218256	-1.84437	0.918655	-2.00769	0.044677	0.248999
Alkalilimnicola ehrlichii	41.96732	-1.04679	0.522004	-2.00532	0.044928	0.248999
Paenibacillus swuensis	9.604103	-1.7897	0.891834	-2.00677	0.044775	0.248999
Streptomyces sp. CB09001	32.96034	-1.32934	0.662808	-2.00562	0.044897	0.248999
Rhizobium tropici	50.71224	-1.1871	0.592837	-2.00241	0.04524	0.248999
Nocardia terpenica	158.8668	-0.96817	0.482363	-2.00715	0.044734	0.248999
Hyphomonas neptunium	17.07061	-1.74441	0.870874	-2.00306	0.045171	0.248999
Mycobacterium colombiense	103.6358	-0.79903	0.399141	-2.00188	0.045297	0.248999
Melittangium boletus	89.88569	-0.94745	0.473262	-2.00197	0.045288	0.248999
Pseudomonas xanthomarina	28.16909	-1.20404	0.600792	-2.00409	0.04506	0.248999
Cellulomonas fimi	240.5768	-0.90847	0.453225	-2.00445	0.045022	0.248999
Pantoea stewartii	16.84162	-1.50496	0.752059	-2.00112	0.04538	0.249076
Lysobacter antibioticus	109.8964	-0.9961	0.497945	-2.00042	0.045454	0.24911
Nocardiopsis gilva	83.85189	-0.84938	0.424905	-1.999	0.045609	0.249578
Methanosarcina horonobensis	4.545018	-3.59984	1.801447	-1.9983	0.045684	0.249615
Pseudoalteromonas arctica	7.854462	-4.02243	2.013603	-1.99763	0.045757	0.249641
Thiomonas intermedia	239.1885	-0.98756	0.495813	-1.9918	0.046393	0.249907
Burkholderia ubonensis	1187.458	-1.05915	0.532655	-1.98844	0.046763	0.249907
Xanthomonas phaseoli	152.425	-1.44286	0.724894	-1.99045	0.046542	0.249907
Leuconostoc garlicum	5.292133	-2.97553	1.49558	-1.98955	0.046641	0.249907
Mycobacterium dioxanotrophicus	156.8124	-0.60138	0.301632	-1.99374	0.04618	0.249907
Burkholderia vietnamiensis	831.1656	-1.26368	0.637727	-1.98153	0.047532	0.249907
Desulfovibrio fairfieldensis	21.55392	-1.51227	0.762278	-1.98388	0.047269	0.249907
Kiritimatiella glycovorans	28.00106	-1.35355	0.682059	-1.98451	0.047199	0.249907
Kosakonia cowanii	44.82605	-1.50232	0.756662	-1.98545	0.047094	0.249907
Arcobacter mytili	9.585912	2.999916	1.512253	1.983739	0.047285	0.249907
Burkholderia multivorans	1164.836	-1.06409	0.536719	-1.98258	0.047414	0.249907
Arcobacter sp. L	10.96466	3.490724	1.761755	1.98139	0.047548	0.249907
Cronobacter muytjensii	11.36795	-2.12782	1.072836	-1.98336	0.047327	0.249907
Aeromicrobium sp. A1-2	121.8505	-1.04051	0.524894	-1.98232	0.047443	0.249907
Luteitalea pratensis	124.7263	-0.92506	0.466029	-1.98497	0.047147	0.249907
Achromobacter xylooxidans	968.5862	-0.94377	0.473721	-1.99225	0.046343	0.249907
Mycolicibacterium thermoresistibile	134.6462	-0.72823	0.366275	-1.9882	0.046789	0.249907
Sphingomonas sanxanigenens	162.4081	-0.83124	0.418533	-1.98608	0.047024	0.249907
Mycolicibacterium smegmatis	197.6459	-0.67363	0.337762	-1.99438	0.046111	0.249907
Staphylococcus succinus	393.9425	-1.8722	0.93773	-1.99652	0.045877	0.249907
Roseobacter litoralis	17.28542	-1.64375	0.825455	-1.99132	0.046445	0.249907
Plantibacter flavus	136.5367	-0.94965	0.47938	-1.981	0.047592	0.249907
Natronomonas moolapensis	9.427167	-2.15077	1.080643	-1.99027	0.046562	0.249907
Sphingomonas koreensis	179.2796	-0.95135	0.479851	-1.9826	0.047412	0.249907
Streptomyces alboflavus	69.41862	-0.96568	0.48412	-1.99471	0.046074	0.249907
Crenobacter sp. K1W11S-77	97.36991	-1.17902	0.594221	-1.98415	0.047239	0.249907
Halobacterium sp. DL1	24.02772	-1.58345	0.799657	-1.98016	0.047686	0.25004
Prochlorococcus marinus	67.37285	0.890928	0.450351	1.978296	0.047895	0.250779
Pseudomonas sabulinigri	37.11542	-1.04883	0.530607	-1.97666	0.04808	0.251382
Pirellula staleyi	13.64207	-1.4667	0.742271	-1.97597	0.048158	0.251432
Enterococcus thailandicus	7.306036	-2.18758	1.108987	-1.97259	0.048542	0.252522
Limnochorda pilosa	93.57684	-1.02664	0.520531	-1.9723	0.048575	0.252522
Luteimonas sp. JM171	77.16791	-1.08492	0.549786	-1.97334	0.048457	0.252522

<i>Chromobacterium vaccinii</i>	110.1633	-0.93876	0.476201	-1.97135	0.048683	0.252723
<i>Alicyclobacillus acidocaldarius</i>	121.5655	-1.0408	0.528169	-1.97058	0.048772	0.252824
<i>Mycobacterium kansasii</i>	102.1599	-0.70758	0.360298	-1.96388	0.049544	0.254046
<i>Clostridium novyi</i>	36.31267	1.157645	0.589457	1.963918	0.04954	0.254046
<i>Robiginitalea biformata</i>	15.01258	-1.61312	0.820661	-1.96563	0.049341	0.254046
<i>Sulfurifustis variabilis</i>	64.71086	-0.95914	0.488424	-1.96374	0.04956	0.254046
<i>Methanococcus maripaludis</i>	13.84507	1.947176	0.989989	1.966866	0.049199	0.254046
<i>Aminomonas paucivorans</i>	11.18092	-1.39719	0.711351	-1.96413	0.049515	0.254046
<i>Salinarchaeum</i> sp. Harcht-Bsk1	13.03434	-1.70289	0.867191	-1.96369	0.049567	0.254046
<i>Acidaminococcus fermentans</i>	13.85675	-1.60056	0.81376	-1.96686	0.049199	0.254046
<i>Megasphaera hexanoica</i>	12.86881	-1.76563	0.899763	-1.96233	0.049724	0.254497
<i>Bifidobacterium choerinum</i>	30.79644	-1.06622	0.543805	-1.96066	0.049919	0.254937
<i>Pseudomonas saudiphocaensis</i>	23.91252	-1.35126	0.689282	-1.96039	0.049951	0.254937
<i>Sphingomonas</i> sp. YZ-8	32.76592	-1.31688	0.672099	-1.95935	0.050072	0.2552
<i>Sphingopyxis</i> sp. FD7	53.19022	-1.32581	0.677097	-1.95807	0.050221	0.255245
<i>Thiolapillus brandeum</i>	11.23128	-1.67178	0.853694	-1.95829	0.050196	0.255245
<i>Mycolicibacterium vanbaalenii</i>	214.3754	-0.82117	0.419621	-1.95694	0.050355	0.255566
<i>Polaribacter</i> sp. SA4-10	9.933151	2.672502	1.366123	1.956268	0.050434	0.25561
<i>Caulobacter vibrioides</i>	209.6005	-0.9305	0.47587	-1.95536	0.05054	0.255794
<i>Nocardia nova</i>	138.6893	-0.77063	0.394256	-1.95465	0.050625	0.255866
<i>Clostridium saccharobutylicum</i>	34.21906	1.455208	0.744783	1.953867	0.050717	0.255976
<i>Aeromonas</i> sp. ASNIH3	294.7209	-1.28103	0.655885	-1.95312	0.050805	0.256065
<i>Planctomyces</i> sp. SH-PL14	63.35783	-0.87201	0.446858	-1.95143	0.051006	0.256723
<i>Rhizobium phaseoli</i>	135.8227	-1.22768	0.630708	-1.94652	0.051593	0.257039
<i>Stenotrophomonas</i> sp. YAU14D1_LEII	32.56497	-2.16492	1.112169	-1.94658	0.051585	0.257039
<i>Chelativorans</i> sp. BNC1	58.31467	-0.83353	0.427981	-1.94759	0.051465	0.257039
<i>Methylorubrum populi</i>	288.3158	-0.78576	0.403724	-1.94629	0.05162	0.257039
<i>Collimonas pratensis</i>	197.3293	-1.00977	0.518849	-1.94617	0.051634	0.257039
<i>Pseudohongiella spirulinae</i>	3.368594	-3.09551	1.588745	-1.9484	0.051367	0.257039
<i>Streptomyces rubrolavendulae</i>	70.68203	-0.92068	0.473009	-1.94643	0.051604	0.257039
<i>Chromobacterium</i> sp. IIBBL 112-1	35.14998	-3.0053	1.542432	-1.94842	0.051365	0.257039
<i>Frankia</i> sp. EAN1pec	129.2096	-0.75594	0.388752	-1.94454	0.05183	0.257313
<i>Burkholderia</i> sp. MSMB0266	143.3401	-1.44444	0.742798	-1.9446	0.051823	0.257313
<i>Bifidobacterium actinocoloniiforme</i>	18.58387	-1.1698	0.601778	-1.9439	0.051908	0.257346
<i>Chlorobaculum limnaeum</i>	21.29006	-1.71699	0.883869	-1.94259	0.052066	0.257358
<i>Thauera</i> sp. MZ1T	147.329	-0.97967	0.504585	-1.94154	0.052193	0.257358
<i>Neorhizobium</i> sp. NCHU2750	51.76257	-1.09219	0.562446	-1.94186	0.052154	0.257358
<i>Azoarcus olearius</i>	144.7262	-1.26022	0.649082	-1.94154	0.052192	0.257358
<i>Caulobacter</i> sp. K31	184.5092	-1.02372	0.527551	-1.94052	0.052317	0.25762
<i>Sphingopyxis macrogoltabida</i>	153.2917	-1.09894	0.56676	-1.93899	0.052502	0.258184
<i>Stenotrophomonas</i> sp. ZAC14D2_NAI	40.38628	-1.75963	0.908539	-1.93677	0.052774	0.258505
<i>Halothiobacillus neapolitanus</i>	20.29646	-1.37258	0.708484	-1.93735	0.052702	0.258505
<i>Campylobacter gracilis</i>	128.4254	-1.3618	0.703702	-1.9352	0.052966	0.258505
<i>Azospirillum</i> sp. CFH 70021	186.6039	-0.96862	0.500588	-1.93497	0.052994	0.258505
<i>Aminobacter</i> sp. MSH1	104.9791	-0.97249	0.502542	-1.93514	0.052973	0.258505
<i>Bordetella pseudohinzii</i>	92.54898	-1.24846	0.644771	-1.93629	0.052832	0.258505
<i>Streptomyces olivoreticuli</i>	88.19951	-0.97508	0.504192	-1.93395	0.053119	0.258767
<i>Delftia</i> sp. Cs1-4	539.0331	-1.09497	0.56723	-1.93039	0.053559	0.259563
<i>Clostridium</i> sp. DL-VIII	31.44299	1.031522	0.534039	1.931545	0.053416	0.259563
<i>Novosphingobium aromaticivorans</i>	53.92098	-0.93907	0.48663	-1.92974	0.053639	0.259563

<i>Geobacter uraniireducens</i>	19.35353	-1.33791	0.693112	-1.93029	0.053571	0.259563
<i>Paenibacillus</i> sp. FSL R7-0331	10.62353	-1.74161	0.902185	-1.93043	0.053553	0.259563
<i>Janthinobacterium</i> sp. Marseille	64.59791	-1.03837	0.538686	-1.9276	0.053905	0.260226
<i>Achromobacter</i> sp. AONIH1	279.8687	-1.03757	0.538464	-1.92692	0.05399	0.260226
<i>Microbacterium paludicola</i>	178.9702	-0.91426	0.474438	-1.92703	0.053976	0.260226
<i>Ferrimonas balearica</i>	16.26143	-1.13015	0.587393	-1.924	0.054354	0.260599
<i>Sagittula</i> sp. P11	75.88099	-0.90937	0.472473	-1.92469	0.054268	0.260599
<i>Caulobacter flavus</i>	171.2138	-0.84318	0.438084	-1.92471	0.054266	0.260599
<i>Streptomyces atratus</i>	86.18106	-0.89211	0.463613	-1.92425	0.054323	0.260599
<i>Micromonospora echinaurantiaca</i>	94.25543	-1.04788	0.546231	-1.91838	0.055063	0.260945
<i>Sulfitobacter</i> sp. AM1-D1	47.43696	-1.07971	0.563006	-1.91776	0.055141	0.260945
<i>Sulfuritalea hydrogenivorans</i>	197.5481	-1.1483	0.597422	-1.92209	0.054595	0.260945
<i>Kitasatospora aureofaciens</i>	93.40702	-0.86892	0.452485	-1.92033	0.054817	0.260945
<i>Shewanella</i> algae	17.72753	-1.42178	0.740631	-1.91968	0.054898	0.260945
<i>Sphingobium cloacae</i>	130.0102	-0.94198	0.489929	-1.92269	0.054519	0.260945
<i>Endozoicomonas montiporae</i>	4.469906	-2.65982	1.385265	-1.92008	0.054848	0.260945
<i>Beutenbergia cavernae</i>	119.6457	-0.90868	0.473829	-1.91775	0.055143	0.260945
<i>Cellvibrio</i> sp. PSBB006	10.95524	-1.4019	0.730779	-1.91837	0.055065	0.260945
<i>Bordetella</i> sp. N	121.8177	-1.01924	0.530852	-1.92	0.054857	0.260945
<i>Pseudomonas palleroniana</i>	34.85993	-0.9563	0.499255	-1.91545	0.055435	0.261359
<i>Streptomyces</i> sp. P3	90.98278	-0.9476	0.494881	-1.9148	0.055518	0.261359
<i>Cupriavidus gilardii</i>	592.3551	-0.9876	0.515564	-1.91557	0.05542	0.261359
<i>Deinococcus</i> sp. NW-56	70.05624	-0.95894	0.500669	-1.91531	0.055453	0.261359
<i>Sphingomonas indica</i>	67.37473	-0.89394	0.467602	-1.91176	0.055907	0.261496
<i>Streptomyces actuosus</i>	79.76599	-0.89906	0.470205	-1.91206	0.055869	0.261496
<i>Arcobacter ellisii</i>	9.882002	2.901871	1.517434	1.912354	0.055831	0.261496
<i>Paenibacillus</i> sp. FSL R5-0345	5.340178	-2.35102	1.228869	-1.91315	0.055728	0.261496
<i>Azospirillum thiophilum</i>	122.2045	-0.87011	0.454928	-1.91264	0.055794	0.261496
<i>Microbacterium</i> sp. BH-3-3-3	150.1222	-0.907	0.474975	-1.90957	0.056189	0.261636
<i>Betaproteobacteria bacterium</i> GR16-	83.63449	-0.85892	0.449677	-1.91008	0.056123	0.261636
<i>Oceanimonas</i> sp. GK1	31.37817	-0.86958	0.455404	-1.90946	0.056203	0.261636
<i>Bordetella flabilis</i>	111.3688	-0.9259	0.485038	-1.90893	0.056272	0.261636
<i>Pannonibacter phragmitetus</i>	175.5923	-0.90656	0.474953	-1.90874	0.056296	0.261636
<i>Pigmentiphaga</i> sp. H8	203.0067	-0.92961	0.487851	-1.90552	0.056713	0.263236
<i>Sphingobium hydrophobicum</i>	77.38279	-1.04327	0.547733	-1.90471	0.056817	0.263387
<i>Novosphingobium</i> sp. PP1Y	53.61139	-1.08843	0.572585	-1.9009	0.057315	0.264175
<i>Rhodococcus</i> sp. WB1	28.83768	-2.13996	1.126332	-1.89993	0.057442	0.264175
<i>Bacillus weihaiensis</i>	6.387974	-2.23594	1.175714	-1.90177	0.057202	0.264175
<i>Isoptricola variabilis</i>	153.9266	-0.79345	0.417405	-1.90091	0.057313	0.264175
<i>Deinococcus maricopensis</i>	53.77811	-0.93565	0.492695	-1.89904	0.057559	0.264175
<i>Candidatus Nitrospira inopinata</i>	17.6654	-1.87003	0.984757	-1.89897	0.057568	0.264175
<i>Auraticoccus monumenti</i>	133.1302	-0.8191	0.431028	-1.90034	0.057388	0.264175
<i>Rubrobacter xylanophilus</i>	69.28485	-1.06498	0.560526	-1.89996	0.057438	0.264175
<i>Steroidobacter denitrificans</i>	36.2389	-0.98826	0.52073	-1.89784	0.057718	0.264528
<i>Burkholderia</i> sp. KK1	306.24	-1.09752	0.578502	-1.89718	0.057804	0.264588
<i>Desulfovibrio africanus</i>	40.37438	-1.15957	0.611673	-1.89574	0.057994	0.265128
<i>Pseudomonas</i> sp. CMR12a	56.18875	-1.31702	0.695319	-1.89413	0.058208	0.265438
<i>Burkholderia</i> sp. CCGE1001	853.5653	-1.24503	0.657143	-1.8946	0.058145	0.265438
<i>Actinomyces</i> sp. 2129	136.8403	-0.67783	0.358447	-1.89103	0.05862	0.26698
<i>Desulfococcus oleovorans</i>	9.411646	-1.43772	0.760511	-1.89047	0.058695	0.266989

Polynucleobacter asymbioticus	14.49204	-2.28434	1.208694	-1.88992	0.058768	0.266989
Marinobacter hydrocarbonoclasticus	28.93262	-0.99148	0.52489	-1.88892	0.058902	0.26712
Acidovorax sp. T1	989.8993	-1.00552	0.532528	-1.8882	0.059	0.26712
Alteromonas australica	7.378944	-2.62611	1.3909	-1.88806	0.059017	0.26712
Ereboglobus luteus	31.71416	-1.34086	0.710719	-1.88663	0.05921	0.267659
Brenneria sp. EniD312	18.22818	-1.28458	0.681995	-1.88356	0.059624	0.268863
Massilia armeniaca	208.1486	-0.94277	0.500459	-1.8838	0.059591	0.268863
Saccharothrix espanaensis	165.9831	-0.80783	0.429207	-1.88214	0.059817	0.269065
Niabella ginsenosidivorans	45.69594	-1.11503	0.592309	-1.88252	0.059765	0.269065
Enterococcus sp. FDAARGOS_553	9.348087	-2.47738	1.321136	-1.87519	0.060767	0.273002
Lactobacillus jensenii	44.37833	1.41904	0.757669	1.872902	0.061082	0.274078
Streptacidiphilus sp. DSM 106435	95.78908	-0.72868	0.390108	-1.86789	0.061778	0.274248
Streptomyces cattleya	121.92	-0.8638	0.462616	-1.8672	0.061873	0.274248
Mycoplasma hominis	5.994334	2.751179	1.472099	1.868882	0.061639	0.274248
Nitrospira moscoviensis	27.33773	-1.11294	0.595047	-1.87033	0.061437	0.274248
Kozakia baliensis	11.35536	-1.43397	0.766131	-1.8717	0.061249	0.274248
Streptococcus agalactiae	671.2474	0.993852	0.531502	1.869895	0.061498	0.274248
Pediococcus damnosus	5.229412	-2.75914	1.47506	-1.87053	0.061411	0.274248
Chryseobacterium shandongense	102.4112	-1.08737	0.582204	-1.86768	0.061806	0.274248
Streptomyces fulvissimus	56.02158	-0.95117	0.509014	-1.86866	0.06167	0.274248
Thermodesulfovibrio yellowstonii	6.400683	-2.4475	1.308776	-1.87007	0.061475	0.274248
Nocardia farcinica	246.6189	-0.64638	0.34686	-1.86352	0.06239	0.275863
Frankia sp. QA3	79.9495	-1.01238	0.543185	-1.86378	0.062353	0.275863
Pseudomonas fulva	283.5268	-1.02799	0.553107	-1.85857	0.063088	0.276614
Paenibacillus crassostreae	4.552297	-2.27748	1.225156	-1.85893	0.063037	0.276614
Tateyamaria omphalii	25.29429	-1.3847	0.744572	-1.85972	0.062925	0.276614
Mycobacterium sp. djl-10	196.1424	-0.59482	0.319577	-1.86129	0.062703	0.276614
Burkholderia sp. MSMB0856	163.5694	-1.13141	0.607931	-1.86109	0.062732	0.276614
Mycolicibacterium hassiacum	165.8259	-0.67989	0.365925	-1.85801	0.063167	0.276614
Ralstonia mannitolilytica	11733.71	-0.94346	0.507719	-1.85824	0.063135	0.276614
Pseudomonas litoralis	54.34602	-1.06871	0.574664	-1.85972	0.062926	0.276614
Candidatus Babela massiliensis	3.444598	4.473114	2.409974	1.856084	0.063442	0.277148
Coriobacteriaceae bacterium 68-1-3	44.53416	-1.09337	0.589035	-1.8562	0.063425	0.277148
Gammapapillomavirus 9	5.71564	-5.23857	2.824982	-1.85437	0.063686	0.277881
Pseudomonas sp. 7SR1	50.81208	-0.91609	0.494865	-1.85119	0.064142	0.279447
Devosia sp. A16	86.95073	-0.97654	0.527632	-1.8508	0.064198	0.279447
Mesorhizobium amorphae	158.8102	-0.93269	0.504728	-1.84791	0.064616	0.279559
Sphingopyxis sp. QXT-31	73.328	-0.98075	0.531591	-1.84493	0.065048	0.279559
Geobacter lovleyi	11.23002	-1.2746	0.689517	-1.84854	0.064525	0.279559
Rhizobium leguminosarum	390.9798	-0.74716	0.404176	-1.8486	0.064515	0.279559
Devriesea agamarum	49.27329	-0.76113	0.411785	-1.84838	0.064547	0.279559
Polynucleobacter diffcilis	9.777026	-1.65851	0.900121	-1.84254	0.065396	0.279559
Bordetella bronchialis	150.7775	-0.90419	0.489818	-1.84598	0.064896	0.279559
Planococcus rifietoensis	10.85947	-2.11172	1.144272	-1.84547	0.064969	0.279559
Erythrobacter sp. HL-111	60.19816	-0.95847	0.520007	-1.84319	0.065301	0.279559
Pseudomonas yamanorum	97.89893	-1.0409	0.565295	-1.84133	0.065573	0.279559
Parvibaculum lavamentivorans	54.10709	-0.9588	0.520202	-1.84314	0.065309	0.279559
Vagococcus penaei	8.91445	-1.77946	0.966479	-1.84118	0.065595	0.279559
Pseudomonas simiae	4.434456	-4.24168	2.303883	-1.8411	0.065607	0.279559
Streptomyces sp. Go-475	79.07617	-0.88719	0.480762	-1.84539	0.064981	0.279559

Acidobacteriaceae bacterium SBC82	25.1966	-1.13757	0.617799	-1.84133	0.065573	0.279559
Thermus oshimai	18.3841	-1.24592	0.676628	-1.84136	0.065568	0.279559
Jeotgalibaca sp. PTS2502	12.16754	-1.62557	0.880206	-1.8468	0.064776	0.279559
blood disease bacterium A2-HR MARI	297.173	-1.45003	0.78458	-1.84816	0.064579	0.279559
Oligella urethralis	8.684264	-2.10793	1.145773	-1.83975	0.065805	0.279594
Comamonas testosteroni	564.7262	-0.97583	0.53039	-1.83983	0.065794	0.279594
Pandoraea pulmonicola	244.9978	-0.98819	0.537216	-1.83947	0.065846	0.279594
Burkholderia anthina	164.9668	-1.26816	0.689948	-1.83804	0.066056	0.279663
Burkholderia sp. MSMB1588	118.8795	-1.812	0.985911	-1.8379	0.066078	0.279663
Bacillus sp. FJAT-45348	20.05495	2.373065	1.291255	1.837797	0.066092	0.279663
Raoultella planticola	23.51323	-1.67437	0.911565	-1.83681	0.066238	0.279953
Altererythrobacter mangrovi	24.83404	-1.07331	0.584722	-1.83559	0.066419	0.280392
Lactobacillus sp. HBUAS52074	4.421065	-2.38093	1.301459	-1.82943	0.067335	0.281442
Micromonospora chokoriensis	61.14313	-0.94957	0.518533	-1.83125	0.067063	0.281442
Zymobacter palmae	16.2009	-1.21635	0.664416	-1.8307	0.067145	0.281442
Brevundimonas subvibrioides	119.5441	-0.89352	0.487555	-1.83265	0.066854	0.281442
Pseudomonas sp. 09C 129	13.24948	-2.51429	1.373791	-1.83018	0.067222	0.281442
Variovorax boronicumulans	890.9111	-0.94379	0.515696	-1.83013	0.06723	0.281442
Granulosicoccus antarcticus	8.854693	-1.36133	0.743504	-1.83096	0.067106	0.281442
Thioalkalivibrio nitratireducens	36.85399	-0.897	0.490365	-1.82924	0.067364	0.281442
Halomonas sp. 1513	51.23869	-0.9958	0.544268	-1.82961	0.067308	0.281442
Gloeobacter kilaueensis	76.14071	-1.17145	0.641028	-1.82746	0.067631	0.282236
Pedobacter cryoconitis	15.78615	-1.6307	0.892586	-1.82694	0.067709	0.282237
Halorientalis sp. IM1011	24.8887	-1.34405	0.735906	-1.82638	0.067793	0.282262
Lactobacillus plantarum	240.073	-1.21868	0.668132	-1.82401	0.068151	0.28343
Polynucleobacter acidiphobus	5.259361	-1.83932	1.008935	-1.82303	0.068298	0.283719
Paenibacillus borealis	10.35453	-1.69963	0.932848	-1.82198	0.068457	0.284055
Streptomyces sp. SirexAA-E	60.63847	-0.87562	0.482533	-1.81464	0.06958	0.285457
Mycobacterium tuberculosis	269.172	-2.88867	1.588954	-1.81797	0.069068	0.285457
Candidatus Filomicrobium marinum	17.33187	-1.3873	0.763922	-1.81602	0.069367	0.285457
Acidovorax sp. 1608163	613.6447	-1.04867	0.577641	-1.81543	0.069458	0.285457
Xanthomonas gardneri	26.90717	-2.13043	1.171516	-1.81852	0.068984	0.285457
Mannheimia varigena	7.882171	-2.04963	1.129484	-1.81466	0.069576	0.285457
Hymenobacter sedentarius	80.81134	-0.90059	0.496167	-1.81509	0.06951	0.285457
Oligotropha carboxidovorans	78.76996	-0.89885	0.494606	-1.81731	0.069169	0.285457
Celeribacter ethanolicus	29.01756	-1.34895	0.74242	-1.81696	0.069224	0.285457
Agrobacterium tumefaciens	409.9235	-0.75741	0.41688	-1.81686	0.069238	0.285457
Rivularia sp. PCC 7116	15.03808	1.920754	1.059223	1.813362	0.069776	0.28594
Aliivibrio salmonicida	3.945662	-2.80769	1.54957	-1.81191	0.07	0.28641
Bifidobacterium asteroides	21.09944	-1.3347	0.736752	-1.8116	0.070048	0.28641
Neisseria elongata	444.8412	-1.0242	0.566168	-1.80901	0.070449	0.287558
Streptomyces sp. CFMR 7	42.67636	-1.68935	0.933978	-1.80877	0.070487	0.287558
Advenella kashmirensis	31.63713	-1.43615	0.795113	-1.80623	0.070883	0.288526
Rhizobium sp. IE4771	28.40621	-2.29957	1.273034	-1.80637	0.07086	0.288526
Sanguibacter keddieii	155.307	-0.74052	0.410193	-1.80529	0.07103	0.288801
Thioalkalivibrio versutus	32.32296	-1.14531	0.634768	-1.80429	0.071186	0.289114
Rhodothermus marinus	65.8343	-1.00276	0.556038	-1.80339	0.071326	0.289361
Nitrospirillum amazonense	175.3716	-0.94843	0.52612	-1.80269	0.071438	0.28949
Actinomadura amylolytica	114.0495	-0.80344	0.447297	-1.79622	0.07246	0.290078
Staphylococcus stepanovicii	89.01579	1.318014	0.733418	1.797085	0.072322	0.290078

Pedobacter steynii	22.23062	-1.58342	0.880834	-1.79763	0.072235	0.290078
Staphylococcus lutrae	36.65092	1.733717	0.963955	1.798546	0.072091	0.290078
Verrucomicrobia bacterium IMCC261	33.93547	-0.98635	0.548671	-1.79771	0.072224	0.290078
Serratia sp. YD25	15.97898	-1.49561	0.830338	-1.80121	0.07167	0.290078
Thauera aromatica	97.84397	-1.01976	0.567195	-1.7979	0.072193	0.290078
Pseudomonas syringae	331.5797	-0.83324	0.463862	-1.7963	0.072446	0.290078
Muricauda ruestringensis	6.786159	-2.13742	1.187948	-1.79925	0.071979	0.290078
Saccharomonospora marina	112.8639	-0.82804	0.460321	-1.79884	0.072045	0.290078
Halorubrum lacusprofundi	20.10912	-1.56281	0.86982	-1.79671	0.072382	0.290078
Parvimonas micra	254.8848	-0.94032	0.524033	-1.79439	0.072751	0.290923
Burkholderia sp. HB1	621.1341	-1.13995	0.635564	-1.7936	0.072877	0.291107
Nostoc sp. 'Peltigera membranacea c	8.160661	3.013437	1.681176	1.792458	0.07306	0.291253
Burkholderia contaminans	433.4966	-0.97826	0.545793	-1.79237	0.073073	0.291253
Micromonospora purpureochromoge	84.76969	-0.75611	0.422159	-1.79106	0.073284	0.29159
Nocardia sp. CFHS0054	171.4699	-0.55479	0.309791	-1.79085	0.073318	0.29159
Nitrosospira multiformis	10.58747	-1.60339	0.89697	-1.78756	0.073847	0.292734
Aquitalea magnusonii	58.03234	-0.88725	0.496223	-1.788	0.073777	0.292734
Streptomyces globosus	76.00159	-0.75583	0.422609	-1.78849	0.073698	0.292734
Martelella endophytica	43.73371	-1.01457	0.567743	-1.78703	0.073932	0.292753
Candidatus Phaeomarinobacter ectoc	14.87942	-1.53015	0.856628	-1.78625	0.074059	0.292937
Asticcacaulis excentricus	34.79609	-1.28293	0.718651	-1.7852	0.074229	0.29329
Orientia tsutsugamushi	5.051183	3.64096	2.041057	1.78386	0.074446	0.29381
Mycolicibacterium gilvum	308.8538	-0.81531	0.457166	-1.78339	0.074522	0.29381
Burkholderia sp. IDO3	325.9053	-1.03955	0.583623	-1.78121	0.074878	0.294894
Streptomyces anulatus	67.0561	-0.76344	0.428751	-1.78062	0.074975	0.294957
Kushneria marisflavi	12.25585	-1.6257	0.914337	-1.77801	0.075403	0.296318
Stenotrophomonas sp. SAU14A_NAIM	4.956979	-4.40232	2.479627	-1.7754	0.075832	0.297191
Bradyrhizobium sp. S23321	295.6863	-0.89457	0.503934	-1.77517	0.07587	0.297191
Micromonospora coriariae	61.66198	-0.92212	0.51927	-1.77579	0.075767	0.297191
Streptomyces lunaelactis	58.95126	-0.88645	0.500102	-1.77253	0.076306	0.297795
Micromonospora echinofusca	78.54304	-0.76711	0.432951	-1.77181	0.076426	0.297795
Prauserella marina	80.73686	-0.57324	0.323541	-1.77177	0.076433	0.297795
Neisseria sp. 10023	44.90315	-1.17468	0.662337	-1.77353	0.07614	0.297795
Brachyspira murdochii	12.33745	2.21203	1.247809	1.772731	0.076273	0.297795
Neorhizobium sp. SOG26	38.77721	-0.89903	0.507807	-1.77042	0.076657	0.298021
Sedimenticola thiotaurini	17.49793	-1.39514	0.78796	-1.77057	0.076632	0.298021
Buchnera aphidicola	78.41897	0.935458	0.528525	1.769942	0.076737	0.298021
Providencia sp. WCHPr000369	5.874327	-2.46487	1.393698	-1.76858	0.076964	0.298583
Paenibacillus naphthalenovorans	8.94792	-1.59078	0.900004	-1.76753	0.077139	0.298895
Desulfovibrio vulgaris	93.22025	-0.8438	0.477503	-1.76712	0.077208	0.298895
Staphylococcus capitis	44191.08	1.099543	0.622621	1.765991	0.077397	0.299308
Spirosoma aerolatum	20.87942	-1.31125	0.743431	-1.76378	0.077768	0.300423
Altererythrobacter atlanticus	27.75844	-1.08489	0.615406	-1.76288	0.07792	0.300692
Ochrobactrum sp. A44	42.63014	-1.11084	0.630888	-1.76075	0.078281	0.300806
Corynebacterium resistens	1932.214	-0.76435	0.433944	-1.76141	0.078169	0.300806
Agrobacterium sp. RAC06	70.5098	-0.98621	0.559891	-1.76143	0.078165	0.300806
Pseudomonas oryzae	116.0565	-1.05032	0.596438	-1.76098	0.078241	0.300806
Sphingobium sp. TKS	67.97201	-0.95829	0.544533	-1.75983	0.078436	0.301085
Rhodobiaceae bacterium	5.957214	-1.7035	0.968792	-1.75838	0.078684	0.301718
Halothiobacillus sp. LS2	23.99147	-1.1344	0.64552	-1.75735	0.078858	0.302068

Achromobacter sp. MFA1 R4	144.3747	-0.94119	0.536906	-1.75299	0.079603	0.304561
Plesiomonas shigelloides	17.09034	-1.33092	0.759408	-1.75257	0.079676	0.304561
Amycolatopsis albispora	171.3577	-0.64395	0.368011	-1.7498	0.080153	0.305997
Sphingopyxis fribergensis	63.89562	-0.9796	0.559958	-1.74941	0.08022	0.305997
Gammaproteobacteria bacterium ESI	6.172502	-2.58187	1.477468	-1.7475	0.080551	0.306938
Chryseobacterium sp. 6424	18.76948	-1.54234	0.88325	-1.74621	0.080775	0.307468
Dinoroseobacter shibae	62.31015	-0.96288	0.552459	-1.7429	0.081351	0.309339
Bacillus sp. OxB-1	3.832427	-2.27144	1.303867	-1.74208	0.081494	0.309558
Pandoraea faecigallinarum	175.5017	-0.90034	0.517417	-1.74007	0.081847	0.310251
Mycobacterium sp. MS1601	162.1313	-0.57923	0.332797	-1.74048	0.081775	0.310251
Streptomyces sp. SM18	66.65319	-0.81762	0.470721	-1.73696	0.082394	0.311352
Acidovorax sp. KKS102	1361.291	-0.84449	0.486013	-1.7376	0.082282	0.311352
Microchaete diplosiphon	9.078717	3.48249	2.004719	1.737146	0.082361	0.311352
Chitinophaga pinensis	52.43415	-0.98664	0.568553	-1.73536	0.082677	0.312097
Immundisolibacter cernigliae	99.15992	-0.80346	0.463463	-1.73361	0.082988	0.312805
Pseudanabaena sp. PCC 7367	6.988811	-1.8427	1.063637	-1.73245	0.083193	0.312805
Burkholderiales bacterium YL45	5.672349	-2.71571	1.567303	-1.73273	0.083144	0.312805
Gemmobacter sp. HYN0069	42.86132	-0.96563	0.557403	-1.73237	0.083208	0.312805
Altererythrobacter ishigakiensis	7.388458	-1.82147	1.052067	-1.73133	0.083393	0.313176
Thermosediminibacter oceani	4.152153	-2.05628	1.188147	-1.73066	0.083512	0.313298
Streptococcus uberis	17.03308	-1.39134	0.804481	-1.72948	0.083723	0.313766
Agrococcus carbonis	137.9268	-0.74856	0.433605	-1.72636	0.084282	0.314546
Mesorhizobium sp. WSM1497	38.00845	-2.37208	1.374296	-1.72603	0.084342	0.314546
Lysobacter capsici	164.8923	-1.12582	0.652301	-1.72591	0.084363	0.314546
Vibrio coralliilyticus	19.8287	-1.3278	0.769302	-1.72598	0.084351	0.314546
Microbulbifer agarilyticus	20.60297	-0.98908	0.572985	-1.72619	0.084314	0.314546
Desulfuromonas soudanensis	50.90021	-0.97585	0.565797	-1.72473	0.084576	0.315018
Lelliottia nimipressuralis	5.501194	-2.11234	1.225323	-1.72391	0.084725	0.315066
Amycolatopsis orientalis	75.93968	-0.68671	0.398393	-1.7237	0.084762	0.315066
Massilia sp. YMA4	261.5821	-0.84529	0.490672	-1.72272	0.084939	0.315081
Achromobacter insolitus	121.3855	-0.78684	0.456645	-1.72309	0.084873	0.315081
Saccharomonospora cyanea	111.8757	-0.90662	0.526976	-1.72042	0.085355	0.316302
Pseudomonas soli	3.183112	-3.76456	2.191133	-1.71809	0.08578	0.31665
Pseudomonas monteilii	223.5688	-0.96047	0.558847	-1.71866	0.085676	0.31665
Singulisphaera acidiphila	63.79171	-0.86654	0.504378	-1.71804	0.08579	0.31665
Staphylococcus pseudintermedius	300.8995	1.194031	0.695014	1.717995	0.085797	0.31665
Burkholderia sp. MSMB0852	33.26022	-1.70189	0.991893	-1.7158	0.086199	0.317168
Streptococcus himalayensis	14.47554	-1.56978	0.914711	-1.71614	0.086136	0.317168
Synechococcus sp. SynAce01	15.31498	-1.23666	0.720689	-1.71594	0.086172	0.317168
Microbacterium sp. PAMC 28756	179.1562	-0.83603	0.487583	-1.71464	0.086412	0.317308
Arcobacter nitrofigilis	11.29236	2.499792	1.457664	1.71493	0.086358	0.317308
Brevibacillus brevis	25.59911	-1.03694	0.605186	-1.71342	0.086635	0.317486
Shewanella amazonensis	5.119629	-1.58612	0.925463	-1.71387	0.086553	0.317486
Rhodobacter sp. CZR27	110.5953	-0.83059	0.484958	-1.71271	0.086766	0.317647
Neorhizobium galegae	96.54349	-0.84583	0.494878	-1.70918	0.087418	0.318836
Nonomurea sp. ATCC 55076	245.1478	-0.66569	0.389423	-1.70944	0.08737	0.318836
Euzebyella marina	4.351906	-2.34719	1.373386	-1.70905	0.087441	0.318836
Porphyrobacter sp. LM 6	32.64115	-1.12699	0.659384	-1.70915	0.087423	0.318836
Streptococcus macedonicus	3.825584	-4.02888	2.358313	-1.70837	0.087567	0.318975
Desulfatibacillum alkenivorans	29.05816	-1.07989	0.632296	-1.70789	0.087657	0.318983

Microbacterium sp. TPU 3598	165.6648	-0.74753	0.43796	-1.70685	0.08785	0.319368
Pelagibacterium halotolerans	38.82378	-0.84239	0.493892	-1.70561	0.088081	0.319888
Halomonas sp. N3-2A	3.109329	-3.7307	2.197039	-1.69806	0.089497	0.323852
Geminocystis herdmanii	9.388917	1.902258	1.119722	1.698866	0.089344	0.323852
Vibrio gazogenes	7.095905	-2.14608	1.263969	-1.69789	0.089529	0.323852
Idiomarina sp. OT37-5b	5.379733	-2.40815	1.417958	-1.69832	0.089447	0.323852
Massilia putida	430.5439	-0.84418	0.497366	-1.69731	0.089639	0.323927
Aeromicrobium erythreum	180.0977	-0.75337	0.444551	-1.69469	0.090135	0.325399
Sphingobacterium sp. 21	34.72206	-1.03576	0.611746	-1.69311	0.090434	0.326153
Rhodobacter sphaeroides	322.3975	-0.84643	0.500285	-1.69189	0.090666	0.326345
Magnetospirillum gryphiswaldense	413.5128	-1.02793	0.607428	-1.69226	0.090596	0.326345
Starkeya novella	111.0314	-0.79451	0.470509	-1.68862	0.091292	0.327175
Streptomyces lydicus	178.4668	-0.53785	0.318491	-1.68873	0.091271	0.327175
Francisella noatunensis	1.773597	4.902936	2.902244	1.68936	0.09115	0.327175
Kosakonia oryzae	138.165	-0.87381	0.517555	-1.68834	0.091347	0.327175
Acidovorax sp. JS42	1391.588	-0.99813	0.591072	-1.68868	0.091281	0.327175
Pseudomonas sp. R2A2	22.32542	-1.30249	0.772709	-1.68561	0.091871	0.327866
Rhodoferrax saidenbachensis	282.0151	-0.95221	0.564706	-1.6862	0.091757	0.327866
Staphylococcus pasteurii	7090.308	-0.82662	0.490401	-1.68559	0.091874	0.327866
Eggerthella lenta	50.01482	-0.71306	0.423066	-1.68546	0.0919	0.327866
Bradyrhizobium sp. BTAi1	293.8172	-0.88727	0.527092	-1.68333	0.092312	0.327968
Desulfovibrio gigas	26.10715	-0.99628	0.591605	-1.68403	0.092175	0.327968
Arcobacter halophilus	10.36311	2.596703	1.543752	1.682072	0.092555	0.327968
Pseudomonas sp. HLS-6	28.75913	-0.93144	0.553881	-1.68167	0.092634	0.327968
Azospirillum humicireducens	64.38383	-0.92702	0.550719	-1.68329	0.092319	0.327968
Altererythrobacter namhicola	42.27711	-0.86938	0.516184	-1.68425	0.092133	0.327968
Coxiella burnetii	8.969604	-2.14754	1.27671	-1.68209	0.092552	0.327968
Pelobacter acetylenicus	12.85882	-1.17351	0.697862	-1.68159	0.092649	0.327968
Akkermansia muciniphila	79.06022	-1.56503	0.932705	-1.67795	0.093357	0.328186
Runella sp. HYN0085	10.53749	-1.64198	0.978107	-1.67873	0.093205	0.328186
Lysobacter gummosus	91.58467	-1.05011	0.626178	-1.67701	0.09354	0.328186
Agrobacterium fabrum	57.44537	-0.88434	0.526672	-1.6791	0.093132	0.328186
Oblitimonas alkaliphila	6.627171	-2.13222	1.269626	-1.67941	0.093073	0.328186
Brevirhabdus pacifica	53.4755	-0.90676	0.540022	-1.67911	0.09313	0.328186
Azospirillum lipoferum	184.7914	-0.77319	0.460828	-1.67782	0.093382	0.328186
Corynebacterium maris	906.4084	-0.49009	0.292387	-1.67618	0.093703	0.328186
Arcobacter suis	6.425009	2.391902	1.426467	1.676801	0.093581	0.328186
Lactobacillus brevis	13.96127	-1.79444	1.070476	-1.6763	0.093679	0.328186
Delftia sp. HK171	192.754	-1.00729	0.600816	-1.67653	0.093634	0.328186
Mycobacteroides saopaulense	74.129	-0.92789	0.553764	-1.6756	0.093816	0.328265
Streptomyces sp. Tue 6075	42.11233	-1.24831	0.745912	-1.67354	0.094222	0.328737
Streptomyces vietnamensis	81.24047	-0.77193	0.461126	-1.67402	0.094127	0.328737
Thermobacillus composti	48.91641	-1.11168	0.664241	-1.6736	0.094208	0.328737
Cellvibrio japonicus	14.51258	-1.18567	0.709177	-1.67189	0.094545	0.328919
Rummeliibacillus stabekisii	6.483205	-2.22904	1.333113	-1.67205	0.094514	0.328919
Corynebacterium humireducens	941.3176	-0.48522	0.290202	-1.67202	0.09452	0.328919
Leptospira santarosai	38.15851	1.310501	0.786052	1.667194	0.095476	0.329636
Pseudomonas guangdongensis	42.49735	-0.95044	0.57006	-1.66726	0.095462	0.329636
Pantoea sp. PSNIH1	124.8972	1.505844	0.902767	1.668031	0.09531	0.329636
Pedobacter sp. eg	35.8162	-1.1844	0.709678	-1.66892	0.095133	0.329636

Beggiatoa leptomitiformis	10.49954	-1.5193	0.911089	-1.66756	0.095403	0.329636
Methylotenera mobilis	8.508418	-1.39469	0.835207	-1.66987	0.094944	0.329636
Chromatiaceae bacterium 2141T.STB	40.83716	-0.73216	0.43908	-1.66749	0.095417	0.329636
Hyphomicrobium sp. MC1	33.51745	-1.39111	0.833065	-1.66987	0.094945	0.329636
Actinomyces sp. Z16	202.7395	-0.6901	0.414231	-1.66598	0.095717	0.330156
Thiobacillus denitrificans	64.00899	-0.88256	0.530258	-1.66439	0.096035	0.330938
Bacillus lehensis	12.92377	-1.40962	0.847443	-1.66338	0.096237	0.331322
Pseudoalteromonas spongiae	14.57554	2.125557	1.27848	1.662566	0.096399	0.331566
Lachnospiraceae bacterium GAM79	145.8845	-1.19625	0.72043	-1.66047	0.09682	0.332698
Novosphingobium resinovorum	158.1872	-0.79636	0.479962	-1.65922	0.097072	0.33325
Pelagibaca abyssi	61.68843	-0.8569	0.516606	-1.65871	0.097174	0.333285
Aggregatibacter aphrophilus	149.1823	-1.065	0.642714	-1.65703	0.097514	0.334137
Actinomyces hongkongensis	481.8617	-0.82732	0.49953	-1.6562	0.097681	0.334394
Mycolicibacterium phlei	1500.936	-0.92273	0.557984	-1.65369	0.09819	0.334563
Microbulbifer aggregans	13.47201	-1.4802	0.894849	-1.65413	0.0981	0.334563
Proteiniphilum saccharofermentans	17.96967	-1.49408	0.903392	-1.65386	0.098156	0.334563
Mycobacterium sp. JS623	171.7884	-0.61111	0.36948	-1.65396	0.098135	0.334563
Tannerella forsythia	163.2043	-1.02957	0.6221	-1.65499	0.097926	0.334563
Sulfitobacter pseudonitzschiae	25.72218	-1.20372	0.728658	-1.65197	0.09854	0.335441
Pseudomonas sp. TCU-HL1	55.44427	-0.88017	0.533057	-1.65117	0.098704	0.33568
Pseudodesulfovibrio aespoeensis	34.69003	-1.09465	0.663493	-1.64982	0.098979	0.33568
Brachyspira hampsonii	5.114669	2.775493	1.681608	1.6505	0.098841	0.33568
Bacillus circulans	26.81687	1.194287	0.723833	1.649948	0.098954	0.33568
Vibrio breoganii	4.009242	-2.8469	1.728309	-1.64722	0.099513	0.337176
Serratia ficaria	126.638	-1.087	0.661677	-1.64279	0.100427	0.338898
Thermotoga caldifontis	4.336488	-2.93936	1.788056	-1.64389	0.100199	0.338898
Sphingobium sp. SCG-1	48.9315	-0.83981	0.510956	-1.64361	0.100257	0.338898
Kitasatospora sp. MMS16-BH015	117.9886	-0.72774	0.442939	-1.64299	0.100385	0.338898
Pectobacterium carotovorum	93.66832	-0.95394	0.580788	-1.6425	0.100487	0.338898
Xanthomonas campestris	809.8201	0.813884	0.495842	1.641419	0.100711	0.339338
Microbacterium sp. LKL04	117.2732	-0.7913	0.482934	-1.63852	0.101313	0.341054
Brevundimonas naejangsanensis	336.4668	-0.80275	0.490105	-1.63792	0.101439	0.341162
Eikenella corrodens	92.01282	-0.86159	0.526242	-1.63725	0.101578	0.341312
Erythrobacter gangjinensis	21.49538	-1.07367	0.656375	-1.63575	0.101892	0.341736
Cronobacter condimenti	16.9015	-1.84631	1.128542	-1.63601	0.101837	0.341736
Paracoccus mutanolyticus	80.719	-0.79355	0.485432	-1.63473	0.102106	0.34214
Actinoplanes missouriensis	194.9928	-0.70371	0.431302	-1.6316	0.102764	0.343649
Arcobacter marinus	12.07987	1.870137	1.146628	1.630988	0.102893	0.343649
Janthinobacterium agaricidamnosum	348.5473	-0.77697	0.476438	-1.63079	0.102934	0.343649
Sphingomonas hengshuiensis	149.228	-0.82837	0.507627	-1.63184	0.102713	0.343649
Fluoribacter dumoffii	3.178485	-3.2516	1.995196	-1.62971	0.103162	0.344094
Geobacter daltonii	9.38246	-1.4474	0.888495	-1.62904	0.103304	0.344251
Salinicola tamaricis	77.26757	-0.84574	0.519407	-1.62827	0.103467	0.344481
Spiroplasma helicoides	4.922059	3.585434	2.203313	1.627292	0.103675	0.344857
Amycolatopsis sp. AA4	132.1488	-0.66336	0.407824	-1.62658	0.103826	0.345043
Reinekea forsetii	5.30261	-2.14015	1.316518	-1.62561	0.104032	0.345097
Alcanivorax pacificus	47.02199	-1.16503	0.71666	-1.62564	0.104027	0.345097
Pseudodesulfovibrio indicus	50.69483	-0.84585	0.520777	-1.6242	0.104332	0.345465
Maritalea myrionectae	11.62095	-1.48116	0.911921	-1.62422	0.104328	0.345465
Parageobacillus genomosp. 1	4.349983	-2.36573	1.457062	-1.62363	0.104455	0.345555

Elizabethkingia anophelis	58.455	0.80503	0.496357	1.621876	0.10483	0.346167
Sinorhizobium sp. CCBAU 05631	6.441557	-2.37793	1.465982	-1.62208	0.104787	0.346167
Phaeobacter piscinae	23.58488	-1.28402	0.791927	-1.62138	0.104935	0.346201
Terriglobus saanensis	38.17582	-1.06809	0.659208	-1.62026	0.105176	0.346681
Algoriphagus sp. M8-2	4.39735	-2.2437	1.386143	-1.61867	0.105519	0.347497
Pseudomonas trivialis	88.90743	-0.82187	0.507986	-1.61789	0.105686	0.347713
Mycolicibacterium fortuitum	23.62939	-1.40358	0.867763	-1.61747	0.105776	0.347713
Saccharomonospora viridis	73.17759	-0.70994	0.439108	-1.61678	0.105925	0.347888
Erythrobacter flavus	40.40057	-1.02032	0.63197	-1.61451	0.106418	0.348877
Streptomyces sp. SCSIO 03032	103.2082	-0.75594	0.468186	-1.61461	0.106394	0.348877
Natronolimnobius aegyptiacus	20.89905	-1.50963	0.935527	-1.61367	0.1066	0.349161
Rhizobium sp. NXC24	41.58413	-0.94971	0.588764	-1.61306	0.106731	0.349274
Anaerolinea thermophila	5.216669	-1.621	1.006165	-1.61106	0.107166	0.349755
Phaeobacter gallaeciensis	67.98729	-0.79419	0.492944	-1.61111	0.107155	0.349755
Mycolicibacterium chubuense	203.0172	-0.87527	0.543055	-1.61175	0.107017	0.349755
Synechococcus sp. NIES-970	6.471517	-1.8946	1.177488	-1.60902	0.107612	0.350581
Actinoalloteichus sp. GBA129-24	28.34508	-3.47983	2.162246	-1.60936	0.107538	0.350581
Croceicoccus naphthovorans	92.9579	-1.01683	0.632826	-1.6068	0.108097	0.351848
Pasteurella multocida	500.4636	-0.81053	0.504669	-1.60606	0.10826	0.352062
Chthonomonas calidirosea	11.37317	-1.6873	1.051197	-1.60512	0.108467	0.352421
Stackebrandtia nassauensis	110.0361	-0.52057	0.324707	-1.60319	0.108893	0.352934
Streptococcus mitis	3687.344	-0.87245	0.544057	-1.6036	0.108803	0.352934
Bifidobacterium animalis	69.74894	-0.7257	0.452794	-1.60271	0.108999	0.352934
Pseudomonas aeruginosa	3541.15	-0.80567	0.50271	-1.60265	0.109013	0.352934
Synechococcus sp. RCC307	16.60396	-1.51611	0.948121	-1.59906	0.109806	0.354403
Clostridium taeniosporum	20.95509	1.423886	0.890628	1.598744	0.109878	0.354403
Escherichia coli	617.7633	0.673029	0.420936	1.598885	0.109846	0.354403
Streptomyces autolyticus	38.34041	-1.8211	1.138974	-1.5989	0.109844	0.354403
Komagataeibacter medellinensis	16.84699	-1.44511	0.904099	-1.5984	0.109954	0.354403
Aggregatibacter segnis	148.7299	-0.95717	0.59983	-1.59573	0.110549	0.355163
Ensifer adhaerens	153.7402	-0.68589	0.429984	-1.59516	0.110677	0.355163
Flavobacterium pallidum	3.930511	-2.74515	1.71965	-1.59634	0.110412	0.355163
Bifidobacterium angulatum	41.31118	-1.14507	0.717756	-1.59534	0.110636	0.355163
Pseudomonas sp. LH1G9	21.61554	-1.6087	1.007796	-1.59626	0.110431	0.355163
Streptomyces sp. 3214.6	72.99508	-0.79817	0.500655	-1.59425	0.110879	0.355497
Streptomyces lincolnensis	73.23615	-0.8969	0.562946	-1.59322	0.11111	0.35561
Nocardioides sp. JS614	278.6914	-0.78925	0.49533	-1.59339	0.111073	0.35561
Sphingomonas sp. NIC1	165.0226	-0.9083	0.57089	-1.59103	0.111604	0.356876
Pectobacterium atrosepticum	15.47644	-1.63741	1.029547	-1.59042	0.111741	0.357002
Victivallales bacterium CCUG 44730	23.04644	-0.97067	0.611235	-1.58804	0.112278	0.358402
Erythrobacter litoralis	104.5257	-0.82043	0.517002	-1.5869	0.112535	0.358908
Deinococcus sp. S14-83	18.67232	-1.10401	0.695963	-1.58631	0.11267	0.359025
Aeromicrobium marinum	127.553	-0.79123	0.499016	-1.58559	0.112833	0.359205
Kyrpidia tusciae	16.16646	-1.77924	1.122416	-1.58519	0.112924	0.359205
Bordetella hinzii	137.5905	-0.86862	0.548264	-1.5843	0.113125	0.359529
Magnetospirillum magneticum	78.93685	-0.85885	0.542555	-1.58296	0.113429	0.360183
Sphingobium yanoikuyae	353.2958	-0.83212	0.526261	-1.5812	0.113832	0.361025
Arachidicoccus sp. BS20	39.09386	-0.95156	0.602281	-1.57993	0.114124	0.361025
Hermiimonas arsenitoxidans	59.52639	-1.17642	0.744297	-1.58058	0.113974	0.361025
Sphingobium sp. EP60837	26.7508	-1.17284	0.74214	-1.58035	0.114027	0.361025

Micromonospora inositola	85.47514	-0.7404	0.468717	-1.57963	0.114191	0.361025
Haloferax mediterranei	2.761317	-2.717	1.720564	-1.57913	0.114306	0.361075
Acidithiobacillus caldus	22.29265	-1.05294	0.667361	-1.57776	0.11462	0.361406
Akkermansia glycaniphila	15.80469	-1.53837	0.975535	-1.57695	0.114808	0.361406
Truepera radiovictrix	41.99921	-0.86725	0.549885	-1.57714	0.114762	0.361406
Methylophilus sp. TWE2	18.05416	-1.61464	1.023298	-1.57788	0.114594	0.361406
Micropruina glycogenica	173.0943	-0.60771	0.385713	-1.57555	0.115129	0.362105
Pimelobacter simplex	241.5847	-0.67929	0.432216	-1.57164	0.116035	0.363643
Cytophagales bacterium TFI 002	4.379138	-1.7065	1.086193	-1.57109	0.116162	0.363643
Caulobacter segnis	164.6597	-0.8796	0.55995	-1.57085	0.116218	0.363643
Thermoanaerobacter kivui	6.618002	-2.78027	1.769712	-1.57103	0.116176	0.363643
Nocardioides sp. CF8	288.9303	-0.81788	0.520503	-1.57132	0.116108	0.363643
Streptomyces katrae	63.87104	-0.75045	0.477297	-1.57229	0.115883	0.363643
Celeribacter indicus	67.74218	-0.74884	0.476898	-1.57022	0.116364	0.363786
Streptomyces hygrosopicus	303.663	-0.74132	0.472627	-1.56852	0.11676	0.364713
Wenzhouxiangella marina	40.62756	-0.74727	0.476728	-1.5675	0.116999	0.365144
Pseudomonas azotoformans	144.7901	-0.97727	0.623704	-1.56688	0.117143	0.365282
Plantibacter sp. PA-3-X8	179.5749	-0.81724	0.522428	-1.56432	0.117743	0.366839
Pseudoalteromonas piscicida	5.407991	2.356633	1.507365	1.563413	0.117956	0.366906
Thermobifida fusca	55.54363	-0.65516	0.419073	-1.56337	0.117967	0.366906
Xylella fastidiosa	12.78716	-1.2358	0.791026	-1.56227	0.118224	0.367393
Lachnospiraceae bacterium Choco86	61.20806	-1.142	0.731273	-1.56166	0.118369	0.36753
Streptomyces clavuligerus	80.61255	-0.75659	0.485207	-1.5593	0.118925	0.368372
Mycobacterium avium	262.2296	-0.7009	0.449352	-1.55981	0.118805	0.368372
Komagataeibacter nataicola	31.56152	-1.23801	0.793994	-1.55922	0.118944	0.368372
Micromonospora krabiensis	119.3975	-0.77314	0.49628	-1.55787	0.119263	0.369047
Nostocales cyanobacterium HT-58-2	16.47553	1.626874	1.0449	1.556966	0.119478	0.369399
Pandoravirus dulcis	2.228853	-3.25453	2.091444	-1.55612	0.11968	0.369709
Campylobacter lari	19.47639	1.565442	1.00634	1.555579	0.119808	0.369719
Candidatus Methylopumilus turicensi	2.967508	-2.50888	1.613168	-1.55525	0.119887	0.369719
Pseudomonas poae	68.04628	-1.14969	0.739864	-1.55392	0.120202	0.370378
Leifsonia sp. 21MFCrub1.1	223.095	-0.83652	0.539094	-1.55172	0.120729	0.371564
Plautia stali symbiont	48.08774	-1.16255	0.749327	-1.55146	0.120791	0.371564
Runella slithyformis	12.88022	-1.4602	0.94241	-1.54943	0.121279	0.372433
Blattabacterium punctulatus	3.766786	-4.00668	2.585432	-1.54971	0.12121	0.372433
Pseudomonas sp. PONIH3	29.03209	-2.10021	1.356808	-1.54791	0.121644	0.372875
Geobacillus thermodenitrificans	3.682104	-3.97383	2.567818	-1.54755	0.12173	0.372875
Micromonospora narathiwatensis	58.36008	-0.82041	0.53003	-1.54785	0.121658	0.372875
Brachyspira hyodysenteriae	15.25195	1.885969	1.219794	1.546137	0.122071	0.373606
Bordetella sp. HZ20	18.4753	-0.93504	0.605063	-1.54535	0.122261	0.373873
Macrococcus canis	20.11054	1.637789	1.060321	1.544616	0.122439	0.373922
Beijerinckia indica	20.15567	-1.07822	0.698134	-1.54444	0.122483	0.373922
Thermobaculum terrenum	5.651263	-1.85943	1.204353	-1.54392	0.122607	0.373987
Deferribacter desulfuricans	8.057834	2.351633	1.5267	1.540338	0.123478	0.37476
Paenibacillus graminis	4.494498	-2.28747	1.486661	-1.53866	0.123887	0.37476
Vagococcus teuberi	10.0315	-1.39698	0.907945	-1.53862	0.123898	0.37476
Catenulispora acidiphila	123.2827	-0.72047	0.467761	-1.54025	0.123498	0.37476
Halopiger xanaduensis	22.23698	-1.31399	0.853891	-1.53883	0.123847	0.37476
Methylobacterium sp. 4-46	178.3471	-0.7426	0.482765	-1.53823	0.123993	0.37476
Denitrobacterium detoxificans	14.58725	-1.52551	0.990791	-1.53969	0.123636	0.37476

Sulfitobacter sp. JL08	11.62513	-1.69913	1.103338	-1.53999	0.123562	0.37476
Jonquetella anthropi	49.2022	-1.28658	0.836292	-1.53843	0.123943	0.37476
Streptomyces sp. 2323.1	75.79492	-0.73566	0.477209	-1.54158	0.123175	0.37476
Arcobacter butzleri	15.65526	1.896554	1.230151	1.541725	0.12314	0.37476
Azoarcus communis	161.1398	-0.79777	0.5189	-1.53743	0.124188	0.374846
Actinoplanes sp. N902-109	147.7083	-0.69197	0.450251	-1.53685	0.124331	0.374846
Andersenella sp. Alg231-50	16.21596	-0.86381	0.561941	-1.53719	0.124246	0.374846
Klebsiella sp. FDAARGOS_511	6.921577	-1.47089	0.957844	-1.53563	0.12463	0.375436
Mycolicibacterium rutilum	169.645	-0.52879	0.344632	-1.53435	0.124943	0.375948
Streptomyces scabiei	76.99777	-0.63725	0.415391	-1.5341	0.125006	0.375948
Blastomonas sp. RAC04	34.57287	-1.13872	0.742963	-1.53267	0.125356	0.376689
Gardnerella vaginalis	389.2049	0.973934	0.635981	1.531389	0.125673	0.377331
Amycolatopsis methanolica	143.3455	-0.60721	0.397312	-1.52829	0.126441	0.378283
Streptococcus sp. NPS 308	716.512	-0.85424	0.558924	-1.52837	0.126422	0.378283
Clostridium argentinense	30.78503	1.021335	0.668409	1.528009	0.12651	0.378283
Mycolicibacter terrae	76.15183	-0.57406	0.375331	-1.52947	0.126147	0.378283
Neisseria polysaccharea	38.26301	-1.215	0.794784	-1.52872	0.126334	0.378283
Cellulophaga lytica	12.55926	1.666224	1.091194	1.526973	0.126768	0.378742
Aeromicrobium sp. 592	223.0555	-0.77609	0.508758	-1.52545	0.127147	0.379564
Gemmatimonas aurantiaca	54.58886	-0.76169	0.499965	-1.52349	0.127636	0.379779
Defluviimonas alba	114.1973	-0.87874	0.576449	-1.52441	0.127407	0.379779
Weissella jogaejeotgali	6.270503	-1.92542	1.263642	-1.5237	0.127583	0.379779
Kutzneria albida	171.5595	-0.50503	0.331406	-1.52389	0.127536	0.379779
Leptospira interrogans	13.05474	2.044741	1.342754	1.522796	0.12781	0.379983
Desulfitobacterium hafniense	6.172999	-1.86518	1.225463	-1.52202	0.128003	0.380248
Muribaculum intestinale	22.11401	-1.51704	0.997002	-1.5216	0.128109	0.380252
Microbacterium chocolatum	162.8819	-0.8273	0.543915	-1.52102	0.128256	0.380377
Pantoea sp. PSNIH2	4.376535	-4.21879	2.776235	-1.51961	0.12861	0.381116
Streptococcus oralis	4674.86	-0.8217	0.540889	-1.51917	0.128719	0.38113
Cronobacter dublinensis	15.02026	-1.24641	0.821604	-1.51704	0.129256	0.381981
Nonlabens marinus	3.779116	-2.40203	1.583078	-1.51732	0.129186	0.381981
Corynebacterium glyciniphilum	473.0626	-0.71422	0.470881	-1.51678	0.129321	0.381981
Legionella hackeliae	4.214733	-2.2646	1.493944	-1.51585	0.129556	0.382364
Cryobacterium sp. GCJ02	93.32907	-0.84233	0.556469	-1.5137	0.130103	0.383666
Chloracidobacterium thermophilum	13.31807	-1.22876	0.812637	-1.51207	0.130516	0.383683
Methylocella silvestris	52.90454	-0.95617	0.631985	-1.51296	0.13029	0.383683
Desulfurobacterium thermolithotroph	3.81459	-2.39137	1.581227	-1.51235	0.130445	0.383683
Caldilinea aerophila	18.12036	-1.01597	0.671931	-1.51201	0.13053	0.383683
Thioalkalivibrio sp. K90mix	25.93694	-0.92854	0.615392	-1.50886	0.131335	0.385736
Streptomyces malaysiensis	34.7346	-1.41779	0.940625	-1.50729	0.131737	0.386605
Rhodothermaceae bacterium RA	41.80933	-1.43491	0.952314	-1.50676	0.131871	0.386688
Neisseria zoodegmatis	34.40045	-1.00546	0.667664	-1.50593	0.132085	0.387002
Salinimonas sp. N102	3.182952	-2.57885	1.715995	-1.50283	0.132882	0.389025
Thermomonospora curvata	104.9473	-0.71059	0.473207	-1.50164	0.13319	0.3893
Streptomyces sp. HNM0039	49.02471	-0.71829	0.478285	-1.50179	0.13315	0.3893
Actinobacillus porcitonisillarum	9.928051	-1.71656	1.143527	-1.50111	0.133326	0.389385
Roseibacterium elongatum	40.08803	-0.88123	0.587345	-1.50037	0.133519	0.389636
Bacillus infantis	9.733232	-1.41629	0.94485	-1.49896	0.133885	0.390298
Mycolicibacter sinensis	101.5284	-0.66214	0.442045	-1.49791	0.134157	0.390298
Arsenicococcus sp. oral taxon 190	223.3571	-0.63082	0.421043	-1.49822	0.134075	0.390298

Olsenella uli	63.9443	-0.87659	0.585234	-1.49784	0.134175	0.390298
Bacteroidales bacterium CF	4.196043	-2.22614	1.486859	-1.49721	0.134338	0.39046
Peptoclostridium acidaminophilum	6.286656	-1.90945	1.277676	-1.49447	0.135053	0.390976
Pseudomonas syringae group genom	71.51348	-1.5022	1.005053	-1.49465	0.135005	0.390976
Janthinobacterium svalbardensis	120.2751	-0.75157	0.502848	-1.49463	0.135011	0.390976
Paenibacillus sp. RUD330	36.19845	-0.85855	0.574256	-1.49506	0.134899	0.390976
Coriobacterium glomerans	21.48826	-1.13875	0.761479	-1.49545	0.134797	0.390976
Arcanobacterium haemolyticum	65.43776	-0.70376	0.471156	-1.49368	0.135259	0.391263
Acidovorax ebreus	937.0497	-0.96455	0.646164	-1.49273	0.135509	0.391321
Aggregatibacter actinomycetemcomi	15.09915	-1.60766	1.077255	-1.49237	0.135602	0.391321
Microcystis aeruginosa	5.382946	-2.51902	1.687538	-1.49272	0.135511	0.391321
Bacillus amyloliquefaciens	6.126276	-2.35835	1.580797	-1.49188	0.135732	0.391385
Phaeobacter porticola	8.923607	-1.67276	1.121746	-1.49121	0.135906	0.391578
Pseudovibrio sp. FO-BEG1	8.22878	-1.26647	0.850325	-1.4894	0.136383	0.392639
Shewanella sp. ANA-3	4.757375	-2.24971	1.511501	-1.4884	0.136646	0.392999
Luteimonas sp. 100111	87.7219	-0.85017	0.571461	-1.48771	0.136828	0.392999
Methylomonas denitrificans	18.83825	-1.18683	0.797765	-1.48769	0.136832	0.392999
Weeksella virosa	19.02097	-1.89648	1.275677	-1.48665	0.137108	0.393484
Streptomyces sp. 3211	37.84734	-0.76547	0.515472	-1.48498	0.137548	0.393814
Oceanithermus profundus	67.85183	-0.72527	0.488305	-1.48527	0.137472	0.393814
Hirschia baltica	1.768145	-2.92289	1.967501	-1.48559	0.137389	0.393814
Halomonas hydrothermalis	40.18397	-0.92398	0.622684	-1.48386	0.137846	0.394356
Pseudopedobacter saltans	27.28402	-1.13883	0.767893	-1.48305	0.13806	0.39466
Fibrella aestuarina	44.74934	-1.07619	0.726819	-1.48068	0.138692	0.395169
Mesoplasma florum	14.41245	2.307859	1.559075	1.480274	0.1388	0.395169
Corynebacterium halotolerans	1275.92	-0.38086	0.257351	-1.47994	0.13889	0.395169
Mannheimia haemolytica	5.634772	-1.69902	1.14742	-1.48073	0.138677	0.395169
Pseudomonas sp. MYb193	88.42196	-0.92204	0.622791	-1.48049	0.138742	0.395169
Austwickia chelonae	64.83328	-0.66042	0.446172	-1.4802	0.13882	0.395169
Rhodocyclaceae bacterium	53.96172	-1.0227	0.691822	-1.47827	0.139334	0.395814
Altererythrobacter sp. B11	53.44701	-0.79576	0.538252	-1.47841	0.139298	0.395814
Nitrobacter winogradskyi	44.35457	-0.93027	0.629684	-1.47735	0.139581	0.396204
Pelodictyon phaeoclathratiforme	2.633016	-2.55835	1.733851	-1.47553	0.14007	0.397283
Celeribacter manganoxidans	43.0842	-0.86822	0.5888	-1.47456	0.140332	0.397716
Corynebacterium xerosis	783.149	-0.58503	0.397273	-1.47263	0.140851	0.398877
Chloroflexus aurantiacus	8.014163	-1.61451	1.097812	-1.47066	0.141383	0.39967
Leisingera methylohalidivorans	34.58833	-0.85774	0.583292	-1.47051	0.141423	0.39967
Sphaerochaeta pleomorpha	3.598214	-1.92067	1.306245	-1.47037	0.14146	0.39967
Sphingomonas panacis	170.3358	-0.85149	0.579705	-1.46883	0.14188	0.399924
Desulfarculus baarsii	45.60488	-0.84361	0.574294	-1.46895	0.141846	0.399924
Marinovum algicola	60.5268	-0.84396	0.574491	-1.46906	0.141817	0.399924
Streptomyces puniscabiei	65.99402	-0.55676	0.379261	-1.468	0.142103	0.400243
Pseudomonas psychrophila	83.5117	-0.85222	0.580789	-1.46735	0.142282	0.400436
Rhodococcus sp. YL-1	133.4787	-1.08153	0.737562	-1.46636	0.14255	0.400882
Trichodesmium erythraeum	17.17001	1.391566	0.95044	1.464129	0.143159	0.402282
Jeotgalibaca dankookensis	6.656069	-1.62736	1.112401	-1.46292	0.143489	0.402898
Pseudomonas sp. ATCC 13867	93.63538	-0.6672	0.456361	-1.46201	0.143738	0.403287
Paenibacillus sabinae	18.21746	-1.29551	0.888964	-1.45733	0.145027	0.404139
Streptococcus pseudopneumoniae	546.1563	-0.89829	0.615631	-1.45913	0.144529	0.404139
Actinobacteria bacterium IMCC26256	4.424699	-2.02415	1.388016	-1.4583	0.144757	0.404139

Nitrosococcus halophilus	16.46689	-0.9478	0.650183	-1.45775	0.14491	0.404139
Yangia sp. CCB-MM3	80.34796	-0.65661	0.450442	-1.4577	0.144924	0.404139
Nitrosomonas eutropha	6.386262	-1.63411	1.121091	-1.45761	0.144949	0.404139
Magnetospirillum sp. XM-1	69.86906	-0.77587	0.53241	-1.45727	0.145041	0.404139
Lacinutrix sp. Bg11-31	9.791767	1.731902	1.188405	1.457333	0.145025	0.404139
Caldithrix abyssi	3.592723	-2.01504	1.38071	-1.45942	0.144448	0.404139
Corynebacterium sp. 2183	1231.099	-0.38358	0.263334	-1.45661	0.145223	0.404337
Aquimarina sp. BL5	15.82081	1.342185	0.921877	1.455926	0.145413	0.404418
Cellulomonas sp. PSBB021	134.3028	-0.63269	0.434628	-1.4557	0.145475	0.404418
Corynebacterium ureicelerivorans	11632.75	-0.79725	0.548038	-1.45473	0.145743	0.404565
Tatumella citrea	12.25808	-1.18052	0.81152	-1.45471	0.14575	0.404565
Staphylococcus condimenti	63.07245	0.819656	0.564416	1.45222	0.146441	0.406172
Erythrobacter sp. YH-07	24.097	-1.10621	0.762074	-1.45157	0.14662	0.406361
Bacillus sonorensis	9.487643	-1.06388	0.73339	-1.45063	0.146883	0.406779
Yersinia rohdei	4.34842	-2.16151	1.491557	-1.44917	0.147291	0.40752
Psychrobacter alimentarius	58.55253	-1.38044	0.952769	-1.44887	0.147375	0.40752
Rhodobacter capsulatus	70.4406	-0.8603	0.594019	-1.44828	0.14754	0.407666
Flavobacterium crassostreae	3.319957	-2.20146	1.521626	-1.44678	0.147959	0.408515
Sphingorhabdus flavimaris	16.75647	-1.09944	0.760223	-1.44621	0.14812	0.408608
Deinococcus puniceus	39.90804	-0.83862	0.580016	-1.44586	0.148217	0.408608
Streptococcus parasanguinis	1663.424	-0.85922	0.594606	-1.44502	0.148452	0.408945
Pseudomonas salegens	21.02057	-0.93052	0.645319	-1.44196	0.149314	0.411009
Propionimicrobium sp. Marseille-P32	165.8388	-0.75312	0.522467	-1.44147	0.149452	0.411032
Deinococcus wulumuqiensis	589.0279	-0.84989	0.589736	-1.44113	0.149548	0.411032
Stenotrophomonas acidaminiphila	201.7128	-0.69885	0.48597	-1.43805	0.150419	0.413114
Cobetia marina	34.81917	-0.98778	0.687852	-1.43603	0.150993	0.413447
Rhodococcus fascians	443.015	0.998147	0.694684	1.436837	0.150764	0.413447
Acinetobacter sp. SWBY1	169.0957	-1.32588	0.923531	-1.43566	0.151098	0.413447
Serratia sp. 3ACOL1	2.465467	3.607818	2.511173	1.436706	0.150802	0.413447
Yersinia similis	3.031751	-2.47437	1.723547	-1.43563	0.151109	0.413447
Pseudomonas sp. NC02	100.3453	-1.07885	0.752765	-1.43318	0.151805	0.413488
Rhizobium sp. 11515TR	71.11979	-0.80987	0.564985	-1.43344	0.151731	0.413488
Pseudomonas agarici	44.79629	-0.83959	0.585804	-1.43322	0.151794	0.413488
Streptomyces cavourensis	16.1046	-1.5523	1.081781	-1.43494	0.151303	0.413488
Pajaroellobacter abortibovis	2.327978	-3.29899	2.301779	-1.43324	0.15179	0.413488
Thermoanaerobacterium thermosacc	26.91996	1.672927	1.166836	1.433729	0.15165	0.413488
Xanthomonas cassavae	69.39823	-0.86911	0.60667	-1.43259	0.151976	0.413644
Aeromonas veronii	63.51096	-0.69977	0.489011	-1.43098	0.152436	0.414584
Paucimonas lemoignei	26.86291	-0.73393	0.513889	-1.42819	0.153236	0.416089
Wigglesworthia glossinidia	5.183589	2.289389	1.603086	1.428114	0.153259	0.416089
Bacillus paralicheniformis	16.11031	-1.45597	1.019686	-1.42786	0.153332	0.416089
Aeromonas schubertii	21.98253	-0.88832	0.622567	-1.42687	0.153618	0.416554
Microvirgula aerodenitrificans	85.92079	-0.8025	0.563469	-1.42421	0.154386	0.417806
Nocardioides sp. 603	227.8075	-0.59822	0.420106	-1.42397	0.154454	0.417806
Tumebacillus avium	27.70076	-0.92776	0.651664	-1.42368	0.154539	0.417806
Sphingopyxis sp. MG	14.24894	-2.57859	1.809961	-1.42466	0.154255	0.417806
Bifidobacterium pseudolongum	44.84731	-0.69044	0.485381	-1.42247	0.154891	0.418447
Lactobacillus sakei	36.67707	-1.08117	0.76046	-1.42173	0.155106	0.418717
Sphingobium sp. SYK-6	85.82851	-0.55723	0.392213	-1.42074	0.155392	0.419179
Stenotrophomonas sp. Pemsol	37.64758	-0.89729	0.631784	-1.42024	0.155537	0.419258

<i>Salinibacter ruber</i>	30.19265	-0.87517	0.616482	-1.41961	0.155721	0.419443
<i>Pseudoalteromonas atlantica</i>	13.05281	-2.24735	1.583821	-1.41894	0.155917	0.41966
<i>Streptomyces</i> sp. 4F	57.54497	-0.79341	0.559344	-1.41847	0.156053	0.419717
<i>Streptococcus</i> sp. ChDC B345	1277.41	-0.91447	0.647868	-1.4115	0.158098	0.41994
<i>Zhihengliuella</i> sp. ISTPL4	117.126	-0.61181	0.433033	-1.41286	0.157698	0.41994
<i>Nostoc</i> sp. PCC 7107	7.392025	-2.25363	1.59258	-1.41508	0.157046	0.41994
<i>Cellulomonas flavigena</i>	122.3975	-0.71311	0.505115	-1.41178	0.158016	0.41994
<i>Corallococcus coralloides</i>	124.014	-0.79654	0.564188	-1.41183	0.157999	0.41994
<i>Tessaracoccus</i> sp. T2.5-30	130.1692	-0.61173	0.432642	-1.41394	0.15738	0.41994
<i>Luteimonas</i> sp. 83-4	99.31658	-0.73803	0.521539	-1.41511	0.157037	0.41994
<i>Kangiella koreensis</i>	3.150194	-2.60483	1.841634	-1.41441	0.157241	0.41994
<i>Faecalibacterium prausnitzii</i>	757.7793	-0.73017	0.515482	-1.41649	0.156633	0.41994
<i>Streptomyces avermitilis</i>	50.7999	-0.65664	0.464077	-1.41494	0.157086	0.41994
<i>Candidatus Puniceispirillum marinum</i>	3.677288	-1.86553	1.318462	-1.41493	0.15709	0.41994
<i>Bacillus cereus</i>	720.8196	0.612622	0.433952	1.411727	0.15803	0.41994
<i>Thermus parvatiensis</i>	2.599109	-3.47393	2.451388	-1.41713	0.156446	0.41994
<i>Paracoccus yeei</i>	1046.43	-0.86523	0.610334	-1.41763	0.1563	0.41994
<i>Sideroxydans lithotrophicus</i>	52.1271	-0.8419	0.59524	-1.41438	0.15725	0.41994
<i>Pseudomonas synxantha</i>	180.2328	-0.76615	0.542419	-1.41248	0.15781	0.41994
<i>Mariniflexile</i> sp. TRM1-10	13.59589	1.479103	1.04751	1.412019	0.157944	0.41994
<i>Marmoricola scoriae</i>	332.8108	-0.59781	0.423896	-1.41028	0.158458	0.420475
<i>Cylindrospermum stagnale</i>	3.156269	-2.25005	1.597474	-1.40851	0.158981	0.420475
<i>Roseburia hominis</i>	91.26268	-1.15035	0.816135	-1.40951	0.158683	0.420475
<i>Blastococcus saxobsidens</i>	231.9099	-0.67706	0.480707	-1.40847	0.158992	0.420475
<i>Agromyces</i> sp. 30A	93.3398	-0.65401	0.464088	-1.40923	0.158768	0.420475
<i>Haliangium ochraceum</i>	183.6123	-0.64147	0.455313	-1.40886	0.158876	0.420475
<i>Shewanella</i> sp. M2	8.042761	-2.01653	1.433398	-1.40682	0.159481	0.42085
<i>Rhodobacteraceae</i> bacterium	7.581533	-1.42688	1.013951	-1.40724	0.159355	0.42085
<i>Sphingobium japonicum</i>	38.79023	-0.97751	0.694652	-1.4072	0.159369	0.42085
<i>Hungateiclostridium clariflavum</i>	14.98269	-1.12033	0.797683	-1.40448	0.160175	0.422374
<i>Pseudopropionibacterium propionicu</i>	353.3056	-0.78466	0.558887	-1.40397	0.160328	0.422385
<i>Streptomyces chartreusis</i>	69.67192	-0.7528	0.536298	-1.40369	0.160411	0.422385
<i>Staphylococcus sciuri</i>	91.83263	0.677112	0.482916	1.402133	0.160876	0.423228
<i>Grimontia hollisae</i>	3.49451	-2.07823	1.482508	-1.40184	0.160964	0.423228
<i>Nocardia brasiliensis</i>	279.0531	-0.44955	0.321655	-1.3976	0.162232	0.426255
<i>Gilliamella apicola</i>	17.12591	1.307109	0.936812	1.395273	0.162933	0.427788
<i>Streptomyces davaonensis</i>	68.25913	-0.60248	0.432401	-1.39334	0.163518	0.428151
<i>Altererythrobacter dongtanensis</i>	47.86251	-0.7301	0.523592	-1.39442	0.163192	0.428151
<i>Campylobacter hyointestinalis</i>	4.640809	2.388637	1.715444	1.392431	0.163792	0.428151
<i>Microvirga</i> sp. 17 mud 1-3	60.01372	-0.68828	0.49442	-1.39209	0.163895	0.428151
<i>Clostridium cellulovorans</i>	24.16152	0.912341	0.654732	1.393458	0.163481	0.428151
<i>Halorubrum trapanicum</i>	37.91756	-0.96199	0.690874	-1.39243	0.163793	0.428151
<i>Martelella</i> sp. AD-3	66.33866	-0.86113	0.61815	-1.39307	0.163599	0.428151
<i>Streptomyces coelicolor</i>	22.78393	-2.26498	1.627518	-1.39168	0.164019	0.428168
<i>Micromonospora zamorensis</i>	65.16846	-0.59435	0.427499	-1.39029	0.164441	0.428682
<i>Corynebacterium testudinis</i>	988.7515	-0.45759	0.329142	-1.39025	0.164452	0.428682
<i>Geodermatophilus obscurus</i>	300.1854	-0.74581	0.536611	-1.38986	0.164572	0.428688
<i>Microvirga ossetica</i>	136.6061	-0.7249	0.522434	-1.38755	0.165276	0.429543
<i>Shimwellia blattae</i>	901.6882	-1.65677	1.193502	-1.38816	0.165089	0.429543
<i>Aerococcus christensenii</i>	54.94885	-0.94474	0.68092	-1.38744	0.165308	0.429543

<i>Salinispira pacifica</i>	3.252053	-2.37377	1.711163	-1.38723	0.165372	0.429543
<i>Microbacterium</i> sp. 10M-3C3	174.7153	-0.56127	0.405343	-1.38468	0.16615	0.431142
<i>Streptomyces albidoflavus</i>	13.78214	-2.4961	1.803478	-1.38405	0.166343	0.431142
<i>Ketogulonicigenium vulgare</i>	31.85295	-0.93343	0.674379	-1.38413	0.166319	0.431142
<i>Streptococcus halotolerans</i>	10.72051	-1.43057	1.034007	-1.38352	0.166506	0.43123
halophilic archaeon DL31	3.935413	-2.0277	1.46623	-1.38294	0.166684	0.43123
<i>Tumebacillus algifaecis</i>	7.594531	-1.31674	0.952243	-1.38278	0.166733	0.43123
<i>Corynebacterium sphenisci</i>	388.8036	-0.45788	0.331627	-1.38072	0.167366	0.43256
<i>Desulfotomaculum nigrificans</i>	6.597362	-1.53272	1.111194	-1.37935	0.167788	0.432986
<i>Trueperella pyogenes</i>	126.3233	-0.37401	0.271211	-1.37902	0.167888	0.432986
<i>Gordonibacter urolithinifaciens</i>	28.08186	-1.16994	0.848189	-1.37934	0.16779	0.432986
<i>Pseudomonas</i> sp. MRSN12121	26.17022	-1.48575	1.078056	-1.37818	0.168149	0.433193
<i>Corynebacterium mycetoides</i>	2103.302	-0.51675	0.375104	-1.37761	0.168325	0.433193
<i>Frankia alni</i>	100.3366	-0.66929	0.485726	-1.37792	0.168227	0.433193
<i>Arthrobacter crystallopoietes</i>	151.839	-0.50925	0.370201	-1.3756	0.168947	0.434323
<i>Nocardioides</i> sp. 78	171.9018	-0.73372	0.533452	-1.37541	0.169003	0.434323
<i>Microbacterium</i> sp. No. 7	271.0968	-0.6381	0.464778	-1.37291	0.169781	0.435095
<i>Archaeoglobus veneficus</i>	3.962357	-1.99837	1.454767	-1.37367	0.169543	0.435095
<i>Streptococcus gallolyticus</i>	10.01118	-1.56365	1.138619	-1.37329	0.169663	0.435095
<i>Zymomonas mobilis</i>	16.65407	-1.05486	0.767862	-1.37376	0.169515	0.435095
<i>Corynebacterium</i> sp. 2184	1481.844	-0.41134	0.300117	-1.37061	0.170498	0.435916
<i>Parasaccharibacter apium</i>	12.80889	-1.39901	1.021203	-1.36996	0.170698	0.435916
<i>Faecalitalea cylindroides</i>	51.16706	-1.12571	0.82135	-1.37056	0.170511	0.435916
<i>Lactobacillus acetotolerans</i>	4.104249	-2.70171	1.970349	-1.37118	0.170317	0.435916
<i>Hahella chejuensis</i>	16.58584	-0.87601	0.639486	-1.36987	0.170727	0.435916
<i>Petrimonas mucosa</i>	18.68028	-1.20664	0.881279	-1.36919	0.17094	0.435916
<i>Acinetobacter junii</i>	231.6309	-0.74919	0.547078	-1.36944	0.170861	0.435916
<i>Sulfitobacter</i> sp. SK011	13.95663	-1.30003	0.95093	-1.36711	0.171591	0.437269
<i>Corynebacterium uterequi</i>	810.4508	-0.40265	0.294671	-1.36643	0.171805	0.437508
<i>Cnuibacter physcomitrellae</i>	212.0127	-0.81108	0.593876	-1.36575	0.172018	0.437745
<i>Vibrio scophthalmi</i>	18.32079	-1.67606	1.229104	-1.36365	0.172679	0.438092
<i>Morganella morganii</i>	25.48427	-1.19997	0.879705	-1.36406	0.172548	0.438092
<i>Marinobacter</i> sp. es.042	14.35359	-1.16263	0.853225	-1.36263	0.172998	0.438092
<i>Streptomyces</i> sp. RTd22	125.1065	-0.52785	0.386874	-1.36439	0.172445	0.438092
<i>Acinetobacter johnsonii</i>	434.6131	-0.77032	0.565016	-1.36335	0.172772	0.438092
<i>Hoyosella subflava</i>	84.62079	-0.64202	0.471145	-1.36268	0.172983	0.438092
<i>Actinobacteria bacterium IMCC25003</i>	5.845513	-1.70338	1.248537	-1.3643	0.172473	0.438092
<i>Leifsonia xyli</i>	284.2904	-0.54676	0.402034	-1.35999	0.173833	0.439902
<i>Streptomyces gilvosporeus</i>	88.68385	-0.52064	0.382936	-1.35959	0.17396	0.439917
<i>Lactococcus</i> sp. 1JSPR-7	4.066806	-1.82511	1.343332	-1.35864	0.17426	0.440368
<i>Arcobacter cryaerophilus</i>	10.86165	1.794016	1.321436	1.357626	0.174582	0.440878
<i>Devosia</i> sp. H5989	64.00413	-0.58645	0.432553	-1.35579	0.175165	0.441504
<i>Brochothrix thermosphacta</i>	314.3006	1.238743	0.913729	1.355701	0.175194	0.441504
<i>Rhodococcus qingshengii</i>	111.3314	-1.63276	1.203804	-1.35633	0.174993	0.441504
<i>Streptococcus</i> sp. Z15	5.766135	-1.59051	1.174155	-1.3546	0.175546	0.441935
<i>Limnobaculum parvum</i>	8.893728	-1.31908	0.974239	-1.35396	0.175748	0.441935
<i>Methylovorus glucosotrophus</i>	10.44418	-1.53849	1.136554	-1.35364	0.175851	0.441935
<i>Gammapapillomavirus 15</i>	15.59997	-2.1592	1.594397	-1.35424	0.175659	0.441935
<i>Pseudonocardia dioxanivorans</i>	196.1499	-0.53712	0.397688	-1.35061	0.176819	0.443145
<i>Streptomyces nodosus</i>	64.60014	-0.59989	0.444059	-1.35092	0.176722	0.443145

<i>Sphingomonas</i> sp. Cra20	123.4668	-0.7741	0.572933	-1.35113	0.176655	0.443145
<i>Bacillus</i> litoralis	23.23268	-1.038	0.768418	-1.35082	0.176752	0.443145
<i>Microbacterium</i> sp. Y-01	209.6727	-0.68121	0.50484	-1.34936	0.177221	0.44333
<i>Clostridium</i> sp. JN-1	17.00194	1.221421	0.905433	1.348991	0.17734	0.44333
<i>Stenotrophomonas</i> sp. ESTM1D_MKC	47.56057	-0.70805	0.524729	-1.34936	0.177221	0.44333
<i>Acetoanaerobium</i> sticklandii	18.09285	-0.9433	0.699333	-1.34886	0.177381	0.44333
<i>Gammaproteobacteria</i> bacterium DV	3.804134	-2.15701	1.600462	-1.34775	0.17774	0.443924
<i>Prevotella</i> enoeca	125.3038	-0.78147	0.580346	-1.34656	0.178122	0.444571
<i>Lactobacillus</i> apis	11.49473	2.469619	1.835967	1.345132	0.178582	0.444806
<i>Methylobacterium</i> currus	138.1093	-0.62655	0.46566	-1.34551	0.178461	0.444806
<i>Pseudomonas</i> thivervalensis	32.51923	-1.13914	0.846559	-1.34562	0.178426	0.444806
<i>Streptomyces</i> griseochromogenes	73.13039	-0.76104	0.566335	-1.3438	0.179013	0.444966
<i>Spiroplasma</i> litorale	2.507289	3.144742	2.339621	1.344125	0.178908	0.444966
<i>Streptomyces</i> qaidamensis	66.22018	-0.68538	0.51003	-1.34381	0.17901	0.444966
<i>Altererythrobacter</i> sp. NS1	84.7435	-0.73327	0.546625	-1.34145	0.179775	0.445642
<i>Bacteroides</i> thetaiotaomicron	134.0254	-0.72295	0.538777	-1.34183	0.179652	0.445642
<i>Actinoalloteichus</i> sp. AHMU CJ021	274.6223	0.653037	0.486732	1.341675	0.179701	0.445642
<i>Corynebacterium</i> marinum	1042.51	-0.37534	0.279658	-1.34215	0.179547	0.445642
<i>Ezakiella</i> massiliensis	577.3077	0.668635	0.4986	1.341024	0.179913	0.445678
<i>Methylophaga</i> nitratreducenticresce	2.967855	-2.15339	1.607901	-1.33926	0.180487	0.445965
<i>Rufibacter</i> tibetensis	16.06799	-0.98536	0.735271	-1.34013	0.180203	0.445965
<i>Streptomyces</i> sp. 2114.2	2.801238	-3.57955	2.672286	-1.33951	0.180405	0.445965
<i>Enterobacter</i> hormaechei	97.28014	-1.2276	0.916696	-1.33916	0.180518	0.445965
<i>Roseobacter</i> denitrificans	9.083056	-1.22599	0.917831	-1.33575	0.181632	0.446002
<i>Agromyces</i> aureus	122.5426	-0.61812	0.462261	-1.33716	0.181172	0.446002
<i>Actinoalloteichus</i> sp. ADI127-7	3.355274	-3.83892	2.873182	-1.33612	0.18151	0.446002
<i>Pedobacter</i> sp. PACM 27299	15.06008	-1.27668	0.957369	-1.33353	0.182359	0.446002
<i>Streptomyces</i> griseus	53.8887	-0.66961	0.501887	-1.33419	0.182141	0.446002
<i>Streptomyces</i> sp. CCM_MD2014	47.9511	-0.7196	0.539348	-1.3342	0.182139	0.446002
<i>Methanosarcina</i> mazei	10.12305	2.062639	1.547162	1.333175	0.182474	0.446002
<i>Mucilagibacter</i> mallensis	40.38437	-0.89828	0.672359	-1.33602	0.181544	0.446002
<i>Planococcus</i> sp. Y42	25.83426	1.294851	0.970285	1.334506	0.182038	0.446002
<i>Bacillus</i> smithii	6.237793	-1.60462	1.203305	-1.33351	0.182364	0.446002
<i>Gordonia</i> sp. 1D	266.6298	-0.63367	0.47533	-1.33311	0.182495	0.446002
<i>Tessaracoccus</i> aquimaris	166.0348	-0.46948	0.351058	-1.33732	0.181118	0.446002
<i>Deinococcus</i> proteolyticus	168.2842	0.872484	0.652407	1.337331	0.181115	0.446002
<i>Enterococcus</i> durans	10.99994	-1.47939	1.10866	-1.3344	0.182074	0.446002
<i>Rathayibacter</i> tritici	83.5981	-0.67767	0.507355	-1.33569	0.18165	0.446002
<i>Sphingobium</i> chlorophenolicum	46.31487	-0.89571	0.670979	-1.33493	0.181898	0.446002
<i>Actinomyces</i> oris	6199.243	-0.67515	0.507183	-1.33118	0.18313	0.446955
<i>Desulfallas</i> gibsoniae	7.699173	-1.3607	1.021915	-1.33152	0.183019	0.446955
<i>Carnobacterium</i> inhibens	14.42284	-1.0587	0.796301	-1.32952	0.183675	0.447086
<i>Fusobacterium</i> ulcerans	9.774205	1.403263	1.055171	1.329891	0.183554	0.447086
<i>Oceanisphaera</i> profunda	4.667748	-1.76151	1.324295	-1.33015	0.18347	0.447086
<i>Streptococcus</i> sp. oral taxon 431	907.9504	-0.86987	0.653994	-1.33009	0.183489	0.447086
<i>Mycoplasma</i> capricolum	2.416346	3.384139	2.547611	1.328358	0.18406	0.447723
<i>Rhodococcus</i> biphenylivorans	117.4499	-1.49723	1.127695	-1.32769	0.184281	0.447962
<i>Neisseria</i> gonorrhoeae	34.26475	-1.26453	0.953431	-1.32629	0.184744	0.448786
<i>Arthrobacter</i> sp. FB24	161.0853	-0.56734	0.428011	-1.32553	0.184997	0.449101
<i>Microbacterium</i> testaceum	122.1256	-0.57955	0.438065	-1.32297	0.185846	0.450862

Paracoccus sp. SC2-6	145.698	-0.71473	0.540579	-1.32217	0.186113	0.45121
Xanthomonas translucens	121.5775	-0.59677	0.451518	-1.32171	0.186266	0.45128
Gramella flava	4.731961	-1.74395	1.320768	-1.32041	0.1867	0.451536
Erwinia amylovora	8.108828	-1.46992	1.113349	-1.32027	0.186744	0.451536
Solimonas sp. K1W22B-7	126.6999	-0.73973	0.560204	-1.32047	0.186679	0.451536
Rhodobacter sp. LPB0142	94.96214	-0.70752	0.536324	-1.31921	0.187099	0.451591
Aeromonas caviae	25.69646	-1.54095	1.167791	-1.31954	0.186989	0.451591
Rhodovulum sulfidophilum	74.2547	-0.76134	0.577169	-1.31909	0.187139	0.451591
Hymenobacter nivis	67.00852	-0.73896	0.560794	-1.31769	0.187606	0.451819
Pseudomonas sihuiensis	59.03606	-0.60392	0.458129	-1.31823	0.187426	0.451819
Sphingobium sp. YBL2	69.46592	-0.80313	0.609427	-1.31784	0.187559	0.451819
Saccharopolyspora erythraea	157.5128	-0.47382	0.360175	-1.31552	0.188334	0.452673
Corynebacterium aquilae	706.0846	-0.44947	0.341613	-1.31572	0.188267	0.452673
Octadecabacter arcticus	8.046924	-1.25888	0.956785	-1.31574	0.188262	0.452673
Vibrio mimicus	3.297663	-2.58276	1.967109	-1.31297	0.189192	0.454437
Micromonospora viridifaciens	79.0711	-0.57872	0.441537	-1.3107	0.189958	0.454891
Polaribacter sp. BM10	3.597663	3.208513	2.448242	1.310537	0.190014	0.454891
Microcella alkaliphila	85.25596	-0.57131	0.435876	-1.31072	0.189954	0.454891
Anoxybacillus flavithermus	53.11169	-1.15594	0.881074	-1.31197	0.189532	0.454891
Sealdella termitidis	12.94279	1.354688	1.033963	1.310189	0.190132	0.454891
Propionibacterium virus SKKY	15.98982	-1.787	1.363778	-1.31033	0.190084	0.454891
Neisseria sp. KEM232	80.32509	-0.67484	0.515352	-1.30948	0.190373	0.455169
Corynebacterium riegellii	1582.47	-0.31005	0.237207	-1.30709	0.191183	0.45525
Psychrobacter sp. DAB_AL43B	20.31863	-1.30363	0.998172	-1.30601	0.191548	0.45525
Salinispora arenicola	40.28316	-0.70025	0.535247	-1.30828	0.190778	0.45525
Intrasporangium calvum	170.3662	-0.56082	0.428828	-1.3078	0.19094	0.45525
Nakamurella sp. s14-144	38.8453	-0.72885	0.558114	-1.30591	0.191582	0.45525
Natrinema sp. J7-2	7.689895	-1.64459	1.25836	-1.30693	0.191235	0.45525
Arthrobacter sp. DCT-5	149.6073	-0.56997	0.437144	-1.30385	0.192283	0.45525
Streptomyces pluripotens	59.63513	-0.63975	0.488826	-1.30874	0.190623	0.45525
Planctomyces sp. SH-PL62	120.5048	-0.743	0.569766	-1.30405	0.192216	0.45525
Deinococcus ficus	70.89106	-0.69622	0.532648	-1.3071	0.191179	0.45525
Niveispirillum cyanobacteriorum	83.65112	-0.72611	0.555908	-1.30617	0.191495	0.45525
Burkholderia thailandensis	563.7477	-0.73057	0.559996	-1.3046	0.19203	0.45525
[Mannheimia] succiniciproducens	4.568427	-2.23066	1.709354	-1.30497	0.191902	0.45525
Halioglobus japonicus	13.46498	-0.93156	0.714243	-1.30426	0.192145	0.45525
Halomonas sp. HL-93	6.614154	-2.83998	2.175089	-1.30569	0.191659	0.45525
Aquiflexum balticum	11.3008	-1.25241	0.961127	-1.30306	0.192553	0.455591
Brevundimonas sp. GW460-12-10-14	332.051	-0.69379	0.532642	-1.30255	0.19273	0.455714
Tabrizicola sp. K13M18	52.63045	-0.71579	0.550149	-1.30108	0.193231	0.456306
Corynebacterium geronticis	551.3027	-0.47324	0.363647	-1.30138	0.193129	0.456306
[Enterobacter] lignolyticus	21.92834	-0.83899	0.645202	-1.30035	0.193481	0.456601
Humibacter sp. BT305	236.2321	-0.69835	0.538141	-1.2977	0.19439	0.457854
Fusobacterium nucleatum	500.9623	-0.59008	0.454654	-1.29787	0.194333	0.457854
Cellulosimicrobium cellulans	125.347	-0.64757	0.498926	-1.29792	0.194313	0.457854
Streptomyces sp. ETH9427	43.55079	-0.70807	0.545938	-1.29699	0.194636	0.458137
Klebsiella oxytoca	97.02132	-0.74012	0.570807	-1.29662	0.194762	0.458137
Shewanella benthica	1.987947	-2.26898	1.751612	-1.29537	0.195194	0.458452
Amycolatopsis keratiniphila	113.6118	-0.53484	0.41296	-1.29514	0.195274	0.458452
Staphylococcus aureus	41536.89	0.918512	0.708891	1.295702	0.195078	0.458452

<i>Shewanella woodyi</i>	4.346635	-1.85454	1.432518	-1.2946	0.195458	0.458589
<i>Vibrio furnissii</i>	9.588716	-1.2541	0.969277	-1.29386	0.195715	0.458677
<i>Pseudomonas mendocina</i>	429.4048	-0.76475	0.591181	-1.2936	0.195803	0.458677
<i>Kineococcus radiotolerans</i>	131.5607	-0.5935	0.458869	-1.2934	0.195874	0.458677
<i>Enterobacter</i> sp. 638	24.50569	-1.43223	1.108042	-1.29258	0.196158	0.459047
<i>Parabacteroides distasonis</i>	70.78235	-1.41646	1.097166	-1.29101	0.196699	0.459333
<i>Propionibacterium</i> phage PAC1	18.82994	-1.95923	1.519457	-1.28943	0.19725	0.459333
<i>Halorhodospira halochloris</i>	6.757753	-1.4655	1.13665	-1.28932	0.197287	0.459333
<i>Stanieria cyanosphaera</i>	7.190805	1.904976	1.474858	1.291634	0.196484	0.459333
<i>Bacillus coagulans</i>	14.1243	-0.80084	0.621135	-1.28931	0.19729	0.459333
<i>Ruegeria</i> sp. AD91A	12.92574	-1.25689	0.97404	-1.29039	0.196915	0.459333
<i>Aeromonas dhakensis</i>	5.178262	-1.91705	1.486225	-1.28988	0.197092	0.459333
<i>Alistipes shahii</i>	96.12636	-0.71916	0.55713	-1.29082	0.196765	0.459333
<i>Thalassospira xiamenensis</i>	16.19635	-0.82549	0.640551	-1.28871	0.197498	0.459523
<i>Planctopirus limnophila</i>	4.292455	-1.56746	1.217505	-1.28744	0.197943	0.460264
<i>Pantoea alhagi</i>	21.49226	-0.98958	0.769123	-1.28664	0.19822	0.460615
<i>Halopenitus persicus</i>	9.542148	-1.23131	0.959182	-1.28371	0.199244	0.462125
<i>Sinorhizobium meliloti</i>	167.7773	-0.58039	0.452126	-1.28369	0.199251	0.462125
<i>Gynuella sunshinyii</i>	4.270634	-1.66886	1.299453	-1.28428	0.199045	0.462125
<i>Haematospirillum jordaniae</i>	3.403885	-1.9408	1.512415	-1.28325	0.199406	0.46217
<i>Jonesia denitrificans</i>	40.64789	-0.61273	0.477613	-1.28291	0.199525	0.46217
<i>Pantoea ananatis</i>	38.90208	-0.66875	0.521854	-1.28149	0.20002	0.462435
<i>Lactobacillus helveticus</i>	80.5898	-1.10141	0.859088	-1.28207	0.199818	0.462435
<i>Pseudarcicella</i> sp. HME7025	14.30504	-1.14731	0.895123	-1.28173	0.199936	0.462435
<i>Staphylococcus hominis</i>	7559.36	-0.63505	0.495865	-1.2807	0.2003	0.462788
<i>Vibrio natriegens</i>	6.681654	-2.62158	2.048188	-1.27995	0.200562	0.463101
<i>Winogradskyella</i> sp. RHA_55	5.951411	-1.83515	1.434207	-1.27956	0.200701	0.463128
<i>Streptococcus</i> sp. oral taxon 064	785.749	-0.75552	0.590876	-1.27865	0.201022	0.463202
<i>Leclercia adecarboxylata</i>	44.53233	-1.83232	1.433316	-1.27838	0.201116	0.463202
<i>Phenyllobacterium</i> sp. HYN0004	75.86408	-0.74307	0.581231	-1.27844	0.201094	0.463202
<i>Calothrix parietina</i>	12.27837	-1.52139	1.190719	-1.27771	0.201352	0.463455
<i>Paenibacillus beijingensis</i>	12.31439	-0.92264	0.722542	-1.27694	0.201624	0.46375
<i>Corynebacterium vitaeruminis</i>	1214.055	-0.37735	0.295582	-1.27662	0.201736	0.46375
<i>Gordonia</i> sp. MMS17-SY073	249.2643	-0.62458	0.489424	-1.27615	0.201902	0.46384
<i>Clavibacter michiganensis</i>	456.8968	-0.55835	0.437981	-1.27482	0.202373	0.464628
<i>Deinococcus soli</i> Cha et al. 2016	38.7032	-0.88046	0.691212	-1.27379	0.202739	0.465174
<i>Pseudomonas asplenii</i>	8.715386	-1.49918	1.177909	-1.27275	0.203108	0.465434
<i>Ketogulonicigenium robustum</i>	25.89534	-0.73785	0.57963	-1.27297	0.20303	0.465434
<i>Janthinobacterium</i> sp. LM6	218.3958	-0.78465	0.61672	-1.2723	0.203266	0.465504
<i>Sphingopyxis</i> sp. EG6	68.40632	-0.71953	0.565726	-1.27187	0.203419	0.465562
<i>Rhizobium etli</i>	188.5311	-0.63241	0.498587	-1.2684	0.204655	0.467292
<i>Dietzia lutea</i>	1477.374	-0.83536	0.658307	-1.26896	0.204456	0.467292
<i>Sinomonas atrocyanea</i>	247.4475	-0.59638	0.470093	-1.26864	0.204569	0.467292
<i>Friedmanniella luteola</i>	200.6397	-0.46918	0.369924	-1.2683	0.204689	0.467292
<i>Propionibacterium</i> virus PHL171M01	9.042595	2.194199	1.731803	1.267003	0.205154	0.468061
<i>Ornithobacterium rhinotracheale</i>	72.28294	-1.452	1.146843	-1.26608	0.205484	0.468519
[<i>Mycobacterium</i>] <i>stephanolepidis</i>	51.07854	-0.76806	0.607053	-1.26522	0.205792	0.468928
<i>Enterobacteriaceae</i> bacterium w17	2.1704	-3.21134	2.540643	-1.26399	0.206235	0.469642
<i>Ochrobactrum pituitosum</i>	18.61726	-1.24567	0.986244	-1.26304	0.206573	0.470119
<i>Acinetobacter</i> sp. WCHA45	89.60263	0.81375	0.644541	1.262527	0.206759	0.470248

Salinisphaera sp. LB1	36.85428	-0.6699	0.530939	-1.26174	0.207044	0.470311
Lentibacillus amyloliquefaciens	7.652359	-1.18584	0.939848	-1.26173	0.207046	0.470311
Thiomicrospira aerophila	6.166325	-1.91272	1.517428	-1.2605	0.207488	0.470394
Arcobacter bivalviorum	9.060188	1.58098	1.253878	1.260872	0.207355	0.470394
Lentzea guizhouensis	139.306	-0.36663	0.290928	-1.26019	0.207599	0.470394
Haemophilus sp. oral taxon 036	64.35929	-1.01272	0.8031	-1.26101	0.207305	0.470394
Sphingobium sp. YG1	118.1242	-0.70915	0.56307	-1.25944	0.207872	0.470565
Pragia fontium	2.623248	-1.89183	1.502602	-1.25904	0.208018	0.470565
Mannheimia sp. USDA-ARS-USMARC-	3.422712	-2.31194	1.83646	-1.25891	0.208062	0.470565
Streptococcus marmotae	8.912082	-1.28589	1.022317	-1.25782	0.208457	0.471165
Altererythrobacter epoxidivorans	21.33498	-0.96856	0.771092	-1.25609	0.209083	0.471316
Kibdelosporangium phytohabitans	160.6686	-0.50192	0.399647	-1.25592	0.209147	0.471316
Paenibacillus polymyxa	112.1204	1.018668	0.810742	1.256464	0.208948	0.471316
Fibrobacter succinogenes	7.867617	-1.14742	0.912931	-1.25686	0.208805	0.471316
Shewanella oneidensis	2.894889	-2.96725	2.362749	-1.25585	0.209172	0.471316
Mucilaginibacter gotjawali	39.34213	-0.6075	0.484283	-1.25442	0.209688	0.471896
Nakamurella multipartita	179.4181	-0.65259	0.520228	-1.25444	0.209683	0.471896
Micromonospora tulbaghiaie	67.56775	-0.75876	0.605165	-1.25381	0.209913	0.472109
Spiroplasma cantharicola	3.517506	2.86927	2.289528	1.253215	0.210128	0.4723
Streptomyces sp. GSSD-12	84.27062	-0.64667	0.516227	-1.25268	0.210322	0.472445
Dietzia sp. oral taxon 368	6009.154	-0.79253	0.633596	-1.25084	0.210993	0.472786
Streptomyces leeuwenhoekii	54.358	-0.59131	0.472682	-1.25098	0.210943	0.472786
Spirosoma rigui	35.26991	-0.85709	0.684634	-1.2519	0.210607	0.472786
Tamlana sp. UJ94	5.362042	2.603929	2.080993	1.251291	0.210828	0.472786
Pontibacter akesuensis	25.18509	-0.85565	0.685337	-1.24852	0.211842	0.474103
Vibrio tapetis	3.569465	-2.47271	1.980393	-1.2486	0.211813	0.474103
Staphylococcus virus SEP9	103.7765	2.17715	1.746549	1.246544	0.212565	0.475137
Shewanella sp. WE21	13.38922	-1.27595	1.023387	-1.24679	0.212474	0.475137
Pseudomonas psychrotolerans	168.7538	-0.58147	0.467666	-1.24334	0.213741	0.475727
Corynebacterium argentoratense	479.0047	-0.47792	0.38431	-1.24358	0.213655	0.475727
Actinosynnema pretiosum	173.9739	-0.75253	0.604948	-1.24397	0.213512	0.475727
Candidatus Saccharibacteria oral taxo	52.9346	-0.94086	0.756103	-1.24436	0.213368	0.475727
Streptococcus equi	59.72091	-0.74338	0.597901	-1.24332	0.213751	0.475727
Neomicrococcus aestuarii	97.51132	-0.6107	0.490627	-1.24474	0.213226	0.475727
Acetobacter acetii	37.61918	-0.77356	0.622338	-1.24298	0.213874	0.475727
Streptomyces peucetius	64.48118	-0.47706	0.383443	-1.24415	0.213443	0.475727
Corynebacterium provencense	302.5847	-0.51426	0.414089	-1.2419	0.214274	0.476033
[Eubacterium] hallii	92.74227	-0.77223	0.621725	-1.24207	0.214211	0.476033
Shewanella sp. FDAARGOS_354	13.27587	1.343961	1.084768	1.238938	0.215369	0.4773
Leuconostoc gelidum	94.01237	-0.79863	0.644191	-1.23974	0.215072	0.4773
Corynebacterium efficiens	806.6196	-0.37621	0.303631	-1.23903	0.215335	0.4773
Arthrobacter sp. PAMC 25486	108.9657	-0.42514	0.343005	-1.23945	0.21518	0.4773
Haemophilus haemolyticus	199.7911	-0.76464	0.617662	-1.23796	0.21573	0.477518
Olsenella sp. Marseille-P2300	32.70394	-0.63247	0.51083	-1.23813	0.215668	0.477518
Algibacter alginicyliticus	8.888745	1.254045	1.013583	1.23724	0.215998	0.477532
Idiomarina loihiensis	6.617331	-1.50175	1.213768	-1.23727	0.215988	0.477532
Polaribacter vadi	10.12747	1.564494	1.26571	1.23606	0.216436	0.478209
Comamonas thiooxydans	259.9423	-0.85412	0.691445	-1.23526	0.216732	0.478283
Halorhodospira halophila	26.86063	-0.83478	0.675733	-1.23537	0.216692	0.478283
Micromonospora aurantiaca	112.3904	-1.12601	0.911901	-1.23479	0.216909	0.478383

Marinobacter sp. Arc7-DN-1	20.81708	-0.85831	0.695469	-1.23415	0.217149	0.478622
Photobacterium gaetbulicola	6.63612	-1.56865	1.271819	-1.23339	0.217431	0.478954
Lactobacillus amylolyticus	3.843271	-2.28205	1.853576	-1.23116	0.218263	0.479335
Methylomonas sp. DH-1	19.1194	-1.37606	1.117556	-1.23131	0.218205	0.479335
Clostridium carboxidivorans	19.05252	0.990644	0.804394	1.23154	0.218121	0.479335
Yersinia aldovae	3.074069	-1.88703	1.532546	-1.2313	0.21821	0.479335
Streptomyces olivaceus	74.80126	-0.681	0.552868	-1.23175	0.218041	0.479335
Oceanobacillus sp. 160	5.970477	-1.65951	1.352389	-1.22709	0.219787	0.48102
Anaeromyxobacter sp. K	70.30998	-0.99457	0.810129	-1.22766	0.219574	0.48102
Brevundimonas sp. LM2	148.3239	-0.5617	0.457784	-1.227	0.219823	0.48102
Yersinia ruckeri	8.720616	-1.32155	1.075638	-1.22862	0.219214	0.48102
Mycoplasma fermentans	2.65424	2.862649	2.332158	1.227468	0.219647	0.48102
Pseudoalteromonas agarivorans	2.424921	-3.37197	2.745266	-1.22829	0.219339	0.48102
Owenweeksia hongkongensis	3.755322	-1.70873	1.393411	-1.22629	0.22009	0.481025
Treponema brennaborensense	5.056428	-1.51965	1.238964	-1.22655	0.219991	0.481025
Ruegeria pomeroyi	63.27814	-0.64802	0.528686	-1.22572	0.220306	0.481208
Neisseria mucosa	376.0299	-0.93928	0.767658	-1.22357	0.221114	0.482683
Pseudonocardia sp. HH130630-07	220.2813	-0.52155	0.426471	-1.22295	0.22135	0.482909
Candidatus Nucleicultrix amoebiphila	1.512824	-2.69158	2.203549	-1.22147	0.221906	0.483833
Candidatus Symbiobacter mobilis	50.84111	-0.83342	0.682593	-1.22096	0.2221	0.483965
Hoefflea sp. IMCC20628	30.6534	-0.76535	0.627648	-1.21939	0.222696	0.484261
Olsenella umbonata	22.72273	-0.84592	0.693928	-1.21903	0.222834	0.484261
Actinobacteria bacterium YIM 96077	71.41959	-0.58655	0.481363	-1.21853	0.223023	0.484261
Bibersteinia trehalosi	8.136686	-1.30296	1.068209	-1.21976	0.222556	0.484261
Psychrobacter sp. AntiMn-1	26.64827	-1.1686	0.957991	-1.21984	0.222524	0.484261
Thermanaerovibrio acidaminovorans	6.582816	-1.61032	1.321563	-1.2185	0.223034	0.484261
Candidatus Bipolaricaulis anaerobius	4.99455	-1.61798	1.328931	-1.21751	0.223412	0.484791
Xanthobacter autotrophicus	178.3472	-0.62378	0.512897	-1.21618	0.223916	0.485517
Corynebacterium cystitidis	627.1749	-0.39693	0.32644	-1.21593	0.224013	0.485517
Campylobacter hominis	16.39872	-1.16295	0.95674	-1.21554	0.224162	0.48555
Hymenobacter sp. sh-6	31.78064	-0.59721	0.491606	-1.21482	0.224435	0.485853
Bordetella genomosp. 6	18.89185	-1.38248	1.138417	-1.21439	0.224601	0.485923
Streptomyces noursei	51.41079	-0.70724	0.582728	-1.21367	0.224873	0.485937
Corynebacterium choanis	207.3236	-0.36294	0.299045	-1.21367	0.224874	0.485937
Oscillatoria acuminata	2.74253	-2.08006	1.716131	-1.21206	0.225488	0.486975
Leclercia sp. LSNH1	11.66124	-1.57517	1.30069	-1.21102	0.225887	0.487545
Jatrophihabitans sp. GAS493	66.65071	-0.51449	0.424981	-1.21062	0.226041	0.487588
Agrococcus jejuensis	152.3902	-0.56474	0.467232	-1.2087	0.226779	0.488241
Streptococcus pneumoniae	2070.195	-0.64723	0.53559	-1.20844	0.22688	0.488241
Shewanella japonica	3.15618	-2.41668	1.999167	-1.20884	0.226723	0.488241
Serratia sp. ATCC 39006	9.244123	-1.15637	0.956483	-1.20898	0.226669	0.488241
Dickeya dadantii	48.3805	-0.72623	0.601533	-1.2073	0.227316	0.488891
Thermococcus pacificus	3.781055	-2.22445	1.843164	-1.20687	0.227484	0.488962
Gammapapillomavirus 11	32.58376	1.854149	1.537878	1.205655	0.227951	0.489388
Streptomyces antibioticus	71.65414	-0.57156	0.473966	-1.2059	0.227856	0.489388
Carnobacterium sp. CP1	7.195028	-1.29034	1.074465	-1.20091	0.229786	0.493038
Acidothermus cellulolyticus	29.89555	-0.81145	0.676094	-1.2002	0.230062	0.493339
Verrucomicrobia bacterium	60.83269	-0.69283	0.577488	-1.19973	0.230244	0.493437
Dickeya paradisiaca	27.62912	-0.7881	0.657781	-1.19812	0.230872	0.494493
Corynebacterium stationis	1304.654	-0.36922	0.308331	-1.19748	0.231118	0.494728

<i>Streptomyces griseorubiginosus</i>	70.21219	-0.64782	0.541202	-1.197	0.231307	0.494841
<i>Aerococcus urinaehominis</i>	3.893336	-1.7573	1.469013	-1.19625	0.2316	0.495178
<i>Agrobacterium</i> sp. H13-3	2.642814	-3.49051	2.920482	-1.19518	0.232015	0.495774
<i>Ralstonia pickettii</i>	76845.62	-0.59016	0.494123	-1.19436	0.232337	0.49617
<i>Corynebacterium glutamicum</i>	681.1084	-0.46131	0.386568	-1.19336	0.232729	0.496425
<i>Caldicellulosiruptor saccharolyticus</i>	6.754025	-1.8821	1.576973	-1.19349	0.232679	0.496425
<i>Stigmatella aurantiaca</i>	85.53332	-0.60105	0.504136	-1.19223	0.23317	0.496782
<i>Alteromonas macleodii</i>	25.91789	-1.13837	0.954706	-1.19237	0.233115	0.496782
<i>Methylobacterium aquaticum</i>	160.5672	-0.53574	0.449766	-1.19116	0.233592	0.4971
<i>Pseudomonas mucidolens</i>	33.82596	-0.67522	0.566825	-1.19122	0.233566	0.4971
<i>Pantoea rwandensis</i>	15.74199	-0.87307	0.733576	-1.19016	0.233982	0.497349
<i>Alcaligenes faecalis</i>	99.24412	-0.58315	0.489949	-1.19024	0.233954	0.497349
<i>Alteromonas</i> sp. BL110	6.159315	-1.50025	1.263044	-1.18781	0.234909	0.499028
<i>Planococcus antarcticus</i>	7.243791	-1.57523	1.327638	-1.18649	0.235428	0.499547
<i>Escherichia albertii</i>	14.69044	-1.12935	0.951841	-1.18649	0.235428	0.499547
<i>Lacimicrobium alkaliphilum</i>	16.37825	-0.85249	0.719677	-1.18455	0.236196	0.50075
<i>Erythrobacter atlanticus</i>	14.23997	-1.12631	0.951262	-1.18401	0.236408	0.50075
<i>Polynucleobacter necessarius</i>	55.54965	-0.57066	0.481965	-1.18403	0.236403	0.50075
<i>Geminocystis</i> sp. NIES-3708	14.06948	1.15697	0.978167	1.182793	0.236891	0.501262
<i>Acidihalobacter prosperus</i>	67.18696	-0.61059	0.516411	-1.18238	0.237056	0.501262
<i>Streptococcus phage SpSL1</i>	1.660463	-2.827	2.391094	-1.18231	0.237085	0.501262
<i>Ehrlichia ruminantium</i>	3.492061	2.949522	2.495337	1.182013	0.2372	0.501262
<i>Chromobacterium</i> sp. ATCC 53434	121.2311	-0.56174	0.47556	-1.18123	0.237513	0.501631
<i>Vibrio anguillarum</i>	17.00904	1.116167	0.945476	1.180534	0.237788	0.50192
<i>Pseudolabrys taiwanensis</i>	116.896	-0.55999	0.474877	-1.17922	0.238309	0.502728
<i>Alteromonas mediterranea</i>	9.015426	-1.69984	1.442663	-1.17826	0.238692	0.503244
<i>Micromonospora echinospora</i>	89.61349	-0.59875	0.508431	-1.17764	0.23894	0.503475
<i>Veillonella rodentium</i>	93.83854	-0.68233	0.579609	-1.17723	0.239104	0.503529
<i>Burkholderia</i> sp. PAMC 28687	239.8501	-0.76753	0.652494	-1.1763	0.239474	0.504016
<i>Acidipropionibacterium virtanenii</i>	102.4762	-0.49735	0.423208	-1.1752	0.239915	0.504614
<i>Acinetobacter indicus</i>	42.32484	-0.75198	0.640035	-1.1749	0.240035	0.504614
<i>Actinoplanes teichomyceticus</i>	179.5375	-0.5779	0.492214	-1.17408	0.240362	0.50501
<i>Altererythrobacter marensis</i>	30.2539	-0.6512	0.555353	-1.17259	0.240959	0.505973
<i>Nocardia seriolae</i>	182.7624	-0.42046	0.359306	-1.17021	0.241918	0.506981
<i>Lactobacillus zymae</i>	1.824143	-2.08464	1.781334	-1.17027	0.241894	0.506981
<i>Mycobacteroides immunogenum</i>	81.23211	-0.57779	0.493834	-1.17001	0.241997	0.506981
<i>Barnesiella viscericola</i>	58.45652	-0.88559	0.756487	-1.17066	0.241734	0.506981
<i>Weissella cibaria</i>	17.04217	-1.2198	1.047014	-1.16503	0.244006	0.510897
<i>Cutibacterium granulosum</i>	14864.27	-0.72089	0.619165	-1.16429	0.244307	0.510938
<i>Haloferax gibbonsii</i>	21.719	-0.67966	0.58374	-1.16431	0.244297	0.510938
<i>Porphyromonas gingivalis</i>	231.3332	-0.85887	0.738404	-1.16315	0.24477	0.511025
<i>Maribacter cobaltidurans</i>	4.533807	-1.97981	1.701967	-1.16325	0.244728	0.511025
<i>Pseudomonas</i> sp. LAB-08	56.61002	-0.77117	0.662859	-1.16341	0.244665	0.511025
<i>Lactobacillus ruminis</i>	12.92102	-1.53168	1.318335	-1.16183	0.245305	0.511849
<i>Lutibacter profundus</i>	11.91638	1.10165	0.948993	1.160862	0.245698	0.512376
<i>Pseudomonas orientalis</i>	104.4578	-0.60167	0.519866	-1.15736	0.247126	0.513587
<i>Streptomyces</i> sp. 11-1-2	28.75652	-1.18543	1.024015	-1.15763	0.247015	0.513587
<i>Treponema succinifaciens</i>	3.761678	1.862987	1.608252	1.158393	0.246704	0.513587
<i>Streptomyces xiamenensis</i>	84.33354	-0.51856	0.448001	-1.1575	0.247069	0.513587
<i>Sulfitobacter</i> sp. D7	22.37244	-0.83427	0.720317	-1.1582	0.246782	0.513587

Lactobacillus acidipiscis	2.779457	-2.17136	1.873932	-1.15872	0.246572	0.513587
Geobacter sp. M18	90.54765	-0.68906	0.595656	-1.15682	0.247348	0.513755
Achromobacter sp. B7	120.4422	-0.61954	0.535785	-1.15632	0.247551	0.513883
Sphingobacter sp. IMCC21906	2.554583	-1.86101	1.611737	-1.15466	0.248229	0.514998
Sphingopyxis alaskensis	38.33056	-0.589	0.510963	-1.15272	0.249027	0.515185
Staphylococcus phage StB12	74.28254	0.902277	0.781951	1.153879	0.24855	0.515185
Propionibacterium virus P144	21.6085	1.627749	1.411561	1.153156	0.248846	0.515185
Caulobacteraceae bacterium OTSz_A	54.28203	-0.7114	0.617141	-1.15274	0.249016	0.515185
Thiomonas arsenitoxydans	101.3228	-0.7552	0.654672	-1.15356	0.248681	0.515185
Legionella spiritensis	2.293963	-1.90105	1.650304	-1.15194	0.249347	0.515553
Methanobrevibacter ruminantium	1.488948	3.133817	2.722116	1.151243	0.249632	0.515557
Paenibacillus stellifer	10.12649	-0.93984	0.816281	-1.15137	0.24958	0.515557
Pseudomonas lini	17.69891	-0.81375	0.707236	-1.15061	0.249893	0.515802
Rhodococcus ruber	229.3302	-0.34854	0.303281	-1.14923	0.250461	0.516681
Halomonas sp. A3H3	36.1619	-0.78904	0.687854	-1.1471	0.251339	0.516869
Burkholderia dolosa	423.293	-0.54091	0.471354	-1.14755	0.251152	0.516869
Macrococcus caseolyticus	30.9879	-1.02291	0.890773	-1.14834	0.250829	0.516869
Synechococcus sp. CC9902	1.363317	-2.54711	2.218945	-1.14789	0.251013	0.516869
Rubrobacter radiotolerans	46.97173	-0.73186	0.638094	-1.14695	0.251404	0.516869
Mucinivorans hirudinis	4.78116	-1.50358	1.310508	-1.14733	0.251246	0.516869
Streptomyces sp. FR-008	7.630479	-2.32009	2.028756	-1.1436	0.25279	0.516892
Mycobacterium sp. VKM Ac-1817D	27.29568	-0.60113	0.524601	-1.14589	0.251842	0.516892
Bacteriovorax stolpii	5.272975	-1.71651	1.500495	-1.14396	0.252639	0.516892
Arthrobacter sp. U41	191.8788	-0.42543	0.37159	-1.14489	0.252254	0.516892
Porphyrobacter HT-58-2	38.70282	-0.74395	0.650385	-1.14385	0.252684	0.516892
Rhodococcus erythropolis	699.1942	-0.63078	0.551398	-1.14397	0.252637	0.516892
Thalassococcus sp. SH-1	56.70212	-0.56344	0.491568	-1.1462	0.251711	0.516892
Pusillimonas sp. T7-7	21.57714	-0.78039	0.681261	-1.1455	0.252001	0.516892
Hymenobacter sp. DG25A	28.79956	0.782034	0.683902	1.143489	0.252836	0.516892
Azoarcus sp. KH32C	161.8394	-0.64216	0.56061	-1.14546	0.252017	0.516892
Gammapapillomavirus 3	2.368201	-3.33401	2.920782	-1.14148	0.253671	0.517016
Hungateiclostridium saccincola	11.14649	1.10267	0.966295	1.141132	0.253815	0.517016
Halomonas huangheensis	20.3423	-0.88026	0.770672	-1.1422	0.253371	0.517016
Auritidibacter sp. NML130574	145.6008	-0.35876	0.314328	-1.14135	0.253723	0.517016
Corynebacterium falsenii	741.1009	-0.43949	0.385308	-1.14061	0.254033	0.517016
Roseiflexus castenholzii	9.967244	-0.98233	0.860541	-1.14152	0.253652	0.517016
Corynebacterium renale	729.4555	-0.32335	0.283346	-1.14119	0.253789	0.517016
Laceyella sacchari	2.945505	-1.70498	1.494685	-1.1407	0.253995	0.517016
Pseudomonas sp. pHDV1	111.2963	-0.73089	0.641039	-1.14017	0.254216	0.517101
Streptomyces sp. TN58	58.57253	-0.62537	0.548776	-1.13957	0.254467	0.517322
Pseudomonas sp. R5-89-07	49.38014	-0.71904	0.632075	-1.13758	0.255296	0.518041
Pseudomonas parafulva	103.982	-0.58493	0.514074	-1.13783	0.255192	0.518041
Methanosphaera stadtmanae	5.049627	2.402586	2.112957	1.137073	0.255508	0.518041
Propionibacterium phage PHL010M0	8.880597	-1.85447	1.630169	-1.13759	0.25529	0.518041
Microlunatus phosphovoros	143.3151	-0.46169	0.406051	-1.13701	0.255533	0.518041
Pseudoalteromonas tunicata	12.19202	-1.1738	1.032932	-1.13638	0.255799	0.518291
Methylobacterium sp. 17Sr1-28	108.7564	-0.58082	0.511354	-1.13585	0.256018	0.518447
Xenorhabdus hominickii	2.654308	-1.9743	1.738874	-1.13539	0.256212	0.518551
Heliobacterium modesticaldum	28.22495	-0.79103	0.697867	-1.1335	0.257004	0.519288
Mycolicibacterium aurum	147.5851	-0.5093	0.449305	-1.13353	0.256991	0.519288

Methylophaga frappieri	3.338955	-1.60269	1.413225	-1.13406	0.256768	0.519288
Acidihalobacter ferrooxidans	35.52038	-0.67719	0.598271	-1.13191	0.257674	0.519383
Pseudomonas vancouverensis	53.80825	-0.76914	0.679637	-1.13169	0.257765	0.519383
Acinetobacter soli	32.06784	-0.90134	0.79608	-1.13222	0.257541	0.519383
Bordetella bronchiseptica	262.3223	-0.6672	0.589245	-1.13229	0.257513	0.519383
Nakamurella panacisegetis	101.8539	-0.49396	0.436368	-1.13199	0.257639	0.519383
Sphingorhabdus sp. YGSMI21	27.6115	-0.71299	0.630369	-1.13106	0.258029	0.519628
Enterobacter kobei	2.963369	-2.26254	2.002651	-1.12977	0.258572	0.520434
Stenotrophomonas sp. ZAC14A_NAIN	21.26677	-1.23247	1.091358	-1.1293	0.258771	0.520546
Vibrio harveyi	3.587794	-1.62874	1.444285	-1.12772	0.25944	0.521028
Streptomyces parvulus	79.84224	-0.44901	0.398085	-1.12792	0.259353	0.521028
Rhizobium sp. CCGE532	34.70849	-2.78016	2.46414	-1.12825	0.259215	0.521028
Francisella tularensis	15.988	1.450529	1.286666	1.127355	0.259592	0.521046
Pseudomonas brassicacearum	38.31337	-0.88266	0.784193	-1.12556	0.26035	0.522279
Paracoccus denitrificans	1941.987	-0.69244	0.616037	-1.12403	0.261	0.522371
Clostridium chauvoei	16.46464	0.938639	0.83477	1.124428	0.260832	0.522371
Thermoactinomycetaceae bacterium	16.96631	-0.85075	0.757239	-1.12349	0.26123	0.522371
Mesorhizobium sp. DCY119	62.32148	-0.5566	0.495228	-1.12392	0.261046	0.522371
Hartmannibacter diazotrophicus	65.54862	-0.60402	0.537661	-1.12342	0.261257	0.522371
Candidatus Profftella armatura	1.359321	-2.53623	2.25476	-1.12483	0.26066	0.522371
Calditerrivibrio nitroreducens	2.578176	2.43698	2.170199	1.122929	0.261467	0.522504
Corynebacterium ammoniagenes	1381.758	-0.32645	0.290884	-1.12226	0.261753	0.522788
Megasphaera elsdenii	25.47842	-0.71467	0.637387	-1.12126	0.262179	0.523351
Prevotella scopos	232.2009	-0.59351	0.529492	-1.12091	0.262325	0.523356
Aeromonas media	31.36378	-0.70931	0.633432	-1.11979	0.262801	0.523632
Corynebacterium crudilactis	322.8855	-0.40026	0.357509	-1.11957	0.262895	0.523632
Taylorella asinigenitalis	7.897346	-1.55837	1.391202	-1.12016	0.262645	0.523632
Deinococcus deserti	46.36325	-0.61029	0.54651	-1.1167	0.264124	0.525791
Anabaenopsis circularis	47.26199	-0.92416	0.828294	-1.11574	0.264531	0.526315
Rhodococcus pyridinivorans	132.4083	-0.92431	0.828792	-1.11525	0.264742	0.526359
Chromobacterium sp. IIBBL 274-1	53.04447	-1.38939	1.246073	-1.11502	0.264843	0.526359
Acinetobacter schindleri	161.7815	-0.81462	0.730813	-1.11467	0.264992	0.526367
Methanobacterium lacus	1.609463	3.254977	2.924675	1.112936	0.265736	0.526932
Rhodococcus sp. P1Y	147.8206	0.50113	0.450028	1.113552	0.265471	0.526932
Actinobacillus equuli	35.81616	-2.20238	1.978224	-1.11331	0.265574	0.526932
Gordonibacter pamelaee	40.42803	-0.85231	0.766043	-1.11261	0.265875	0.526932
Tenacibaculum maritimum	3.887392	2.195501	1.9744	1.111984	0.266145	0.526932
Erysipelotrichaceae bacterium GAM1	52.68847	1.065128	0.957822	1.112032	0.266125	0.526932
Flavobacterium indicum	9.860561	1.465631	1.319075	1.111105	0.266523	0.527394
Nostoc sp. PCC 7524	2.937299	-2.22618	2.004403	-1.11065	0.266721	0.527499
Pseudomonas versuta	47.69739	-0.72659	0.655016	-1.10927	0.267312	0.52838
Mesorhizobium japonicum	65.15295	-0.63761	0.57518	-1.10853	0.267632	0.528727
Methylobacterium sp. 17Sr1-1	107.0854	-0.54559	0.493977	-1.10448	0.269387	0.528819
Rhizobium sp. NT-26	62.19321	-0.6837	0.619116	-1.10431	0.269457	0.528819
Citromicrobium sp. JL477	51.06502	-0.62157	0.562922	-1.10419	0.269512	0.528819
Staphylococcus phage StB20	95.91993	0.987931	0.892799	1.106555	0.268486	0.528819
Brevundimonas sp. DS20	362.9909	-0.49824	0.450244	-1.1066	0.268466	0.528819
Glutamicibacter halophytocola	139.0719	-0.45305	0.409895	-1.1053	0.269032	0.528819
Acetobacter senegalensis	3.059188	-2.37298	2.145769	-1.10589	0.268775	0.528819
Desulfotalea psychrophila	1.993738	-1.70082	1.538964	-1.10517	0.269086	0.528819

<i>Corynebacterium pseudopelargi</i>	655.004	-0.39206	0.354689	-1.10537	0.268998	0.528819
<i>Celeribacter marinus</i>	9.522279	-1.23428	1.11759	-1.10441	0.269413	0.528819
<i>Yersinia frederiksenii</i>	16.19405	-1.30338	1.179376	-1.10514	0.269097	0.528819
<i>Anaerostipes hadrus</i>	223.348	-0.81081	0.732041	-1.1076	0.268034	0.528819
<i>Paenibacillus xylanexedens</i>	18.08912	-1.17684	1.065926	-1.10406	0.269568	0.528819
<i>Sphingomonas</i> sp. KC8	50.84606	-0.58472	0.530577	-1.10205	0.270439	0.528893
<i>Thermus</i> sp. CCB_US3_UF1	17.75918	-0.92115	0.836087	-1.10174	0.270574	0.528893
<i>Vibrio nigripulchritudo</i>	8.689091	-1.37301	1.246718	-1.1013	0.270767	0.528893
Lachnospiraceae bacterium oral taxon	38.87317	-0.68863	0.625491	-1.10095	0.27092	0.528893
<i>Pediococcus pentosaceus</i>	10.09767	-0.90957	0.825427	-1.10194	0.270487	0.528893
<i>Shewanella marisflavi</i>	3.229658	-1.8997	1.724415	-1.10165	0.270615	0.528893
<i>Pseudomonas prosekii</i>	33.14575	-0.72391	0.6577	-1.10068	0.271038	0.528893
<i>Zhongshania aliphaticivorans</i>	5.100471	-1.2818	1.161728	-1.10336	0.269873	0.528893
<i>Sphaerochaeta globosa</i>	4.788784	1.499671	1.362562	1.100626	0.27106	0.528893
<i>Prevotella fusca</i>	125.0174	-0.511	0.463375	-1.10279	0.270119	0.528893
<i>Klebsiella pneumoniae</i>	525.6997	0.467763	0.425352	1.099707	0.27146	0.529107
<i>Streptococcus equinus</i>	197.8729	-0.7292	0.663065	-1.09974	0.271444	0.529107
<i>Pluralibacter gergoviae</i>	53.33828	-0.52344	0.476172	-1.09927	0.27165	0.529194
<i>Amycolatopsis japonica</i>	100.9777	-0.53143	0.483622	-1.09886	0.271829	0.52926
<i>Azotobacter vinelandii</i>	140.8811	-0.57709	0.525559	-1.09806	0.27218	0.529659
<i>Glaesserella parasuis</i>	7.949431	-1.27532	1.16261	-1.09694	0.272666	0.530321
<i>Phytobacter ursingii</i>	12.54372	-1.36805	1.248432	-1.09582	0.273159	0.530406
<i>Fusobacterium gonidiaformans</i>	3.415329	-1.44533	1.319027	-1.09576	0.273186	0.530406
<i>Rhodococcus</i> sp. WMMA185	86.55484	-0.57165	0.52191	-1.09529	0.273388	0.530406
<i>Gilvibacter</i> sp. SZ-19	1.83077	-1.95332	1.782994	-1.09553	0.273286	0.530406
<i>Fermentimonas caenicola</i>	9.200091	-1.31405	1.199847	-1.09518	0.273438	0.530406
<i>Lysinibacillus</i> sp. Marseille-P5727	29.57421	0.837358	0.765405	1.094006	0.273952	0.53112
<i>Arthrobacter</i> sp. QXT-31	141.36	-0.55748	0.510116	-1.09285	0.274458	0.531217
<i>Isoptericola dokdonensis</i>	152.2442	-0.48057	0.439666	-1.09304	0.274377	0.531217
<i>Gordonia rubripertincta</i>	452.7702	-0.53882	0.493168	-1.09256	0.274586	0.531217
<i>Yersinia entomophaga</i>	5.426888	-1.35332	1.238485	-1.09272	0.274517	0.531217
<i>Olleya</i> sp. Bg11-27	7.591951	1.437172	1.319377	1.089281	0.27603	0.533726
<i>Actinomyces</i> sp. Chiba101	168.272	-0.47917	0.440601	-1.08753	0.276804	0.534383
<i>Paracoccus</i> sp. BM15	84.87415	-0.54922	0.504845	-1.08789	0.276643	0.534383
<i>Sphingobium</i> sp. LF-16	15.52487	-3.1542	2.900378	-1.08751	0.27681	0.534383
<i>Saccharomonospora azurea</i>	71.94424	-0.38071	0.350408	-1.08647	0.277269	0.534702
<i>Bacillus methanolicus</i>	8.215239	-1.02168	0.940177	-1.08668	0.277176	0.534702
<i>Corynebacterium striatum</i>	9791.981	-0.32993	0.304711	-1.08277	0.278913	0.537586
<i>Halorhabdus tiamatea</i>	12.39649	-1.12197	1.037401	-1.08152	0.279465	0.538366
<i>Sphingorhabdus</i> sp. M41	16.04024	-0.75907	0.702416	-1.08066	0.279848	0.538818
<i>Gemmata</i> sp. SH-PL17	60.035	-0.57639	0.533811	-1.07976	0.280251	0.539308
<i>Dietzia timorensis</i>	295.6421	-0.45062	0.417475	-1.0794	0.280409	0.539327
<i>Streptomyces fungicidicus</i>	63.13248	-0.45005	0.417292	-1.0785	0.28081	0.539418
<i>Aeromonas salmonicida</i>	53.79546	-0.52318	0.485379	-1.07787	0.281091	0.539418
<i>Pseudomonas fuscovaginae</i>	29.14113	-0.81651	0.757689	-1.07763	0.281197	0.539418
<i>Polaribacter</i> sp. KT25b	11.46493	1.528592	1.417809	1.078136	0.280973	0.539418
<i>Rhodococcus aetherivorans</i>	111.1694	-0.7481	0.693417	-1.07886	0.28065	0.539418
<i>Vibrio rumoiensis</i>	12.72623	-1.03303	0.960555	-1.07545	0.282171	0.540724
<i>Stenotrophomonas</i> sp. MYb57	36.36623	-0.91882	0.854366	-1.07545	0.282175	0.540724
<i>Paenibacillus lautus</i>	3.138213	-1.9896	1.852023	-1.07429	0.282695	0.54138

Rhodococcus sp. 008	108.8729	-1.18526	1.103576	-1.07402	0.282815	0.54138
Propionibacterium virus PHL152M00	18.68585	-1.5817	1.474188	-1.07293	0.283302	0.541643
Chryseobacterium balustinum	67.09531	-0.76915	0.716642	-1.07327	0.283151	0.541643
Flammeovirga sp. MY04	15.05827	1.078113	1.005343	1.072384	0.283548	0.541643
Vibrio vulnificus	36.2618	-0.67916	0.633198	-1.07258	0.28346	0.541643
Streptomyces sp. SAT1	81.75913	-0.51289	0.478953	-1.07087	0.28423	0.542661
Sphingopyxis sp. 113P3	66.14943	-0.68888	0.643642	-1.07029	0.284491	0.542875
Porcine type-C oncovirus	4.847069	2.049136	1.915747	1.069628	0.284787	0.543155
Marinobacter sp. LV10R510-11A	6.947749	-1.21904	1.140723	-1.06865	0.285226	0.543424
Polaribacter reichenbachii	13.2297	1.122447	1.050065	1.068931	0.285101	0.543424
Novosphingobium pentaromativoran	64.64741	-0.63098	0.590769	-1.06807	0.28549	0.543642
Parabacteroides sp. CT06	161.5165	-1.21755	1.140685	-1.06739	0.285797	0.54394
alpha proteobacterium HIMB5	1.805042	-2.24352	2.102815	-1.06691	0.286011	0.544063
Candidatus Ruthia magnifica	1.450857	-2.62595	2.463514	-1.06594	0.286453	0.544619
Lactobacillus gasseri	128.9903	1.085218	1.018863	1.065127	0.286818	0.54503
Microbacterium foliorum	301.5356	-0.58179	0.547165	-1.06327	0.287658	0.54634
Eubacterium limosum	43.8314	-0.82512	0.776761	-1.06226	0.288119	0.546929
Lactococcus virus Bibb29	3.152377	2.282701	2.149765	1.061837	0.288309	0.547006
Corynebacterium ulcerans	551.9321	-0.38965	0.367465	-1.06037	0.288974	0.547982
Flavobacteriaceae bacterium 3519-1C	10.05996	-1.10948	1.049661	-1.05699	0.290518	0.548492
Aminobacter aminovorans	111.7571	-0.58859	0.556063	-1.0585	0.289826	0.548492
Persicobacter sp. JZB09	11.86408	-0.90716	0.85827	-1.05696	0.290528	0.548492
Pseudomonas plecoglossicida	99.26476	-0.50137	0.474117	-1.05748	0.290292	0.548492
Clostridium acetobutylicum	25.13819	0.658904	0.623104	1.057455	0.290304	0.548492
beta proteobacterium CB	4.528744	-1.85816	1.756129	-1.0581	0.29001	0.548492
Labrenzia sp. VG12	32.0401	-0.62311	0.589294	-1.05739	0.290334	0.548492
Corynebacterium glaucum	1604.787	-0.38242	0.361859	-1.05681	0.2906	0.548492
Paenarthrobacter aurescens	97.52971	-1.06886	1.010661	-1.05758	0.290246	0.548492
Alistipes sp. Marseille-P5997	44.39913	-0.88418	0.83718	-1.05614	0.290902	0.548493
Corynebacterium callunae	479.5563	-0.38579	0.365263	-1.0562	0.290875	0.548493
Jeotgalicoccus saudimassiliensis	14.7443	-1.02426	0.971066	-1.05478	0.291526	0.548953
Corynebacterium variabile	464.6741	-0.43979	0.416752	-1.05527	0.291302	0.548953
Candidatus Sulcia muelleri	6.845036	1.370549	1.299971	1.054292	0.291749	0.548953
Candidatus Nitrosotenuis cloacae	40.23812	-0.73477	0.696755	-1.05456	0.291628	0.548953
Rhizobium sp. Y9	69.28895	-1.37651	1.306124	-1.05389	0.291932	0.549013
Mycolicibacterium goodii	156.5806	-0.34772	0.330347	-1.05258	0.292534	0.549861
Ferropasma acidarmanus	1.913836	2.782971	2.645761	1.05186	0.292864	0.550197
Fusobacterium sp. oral taxon 203	6.826747	-1.16598	1.110738	-1.04973	0.293842	0.550751
Hafnia paralvei	4.308844	-1.56039	1.486005	-1.05005	0.293693	0.550751
Sphingomonas sp. LK11	176.8706	-0.54388	0.518089	-1.04978	0.293817	0.550751
Bacillus altitudinis	14.7632	2.769507	2.640359	1.048913	0.294218	0.550751
Alteromonas sp. RKMC-009	5.527117	-1.1764	1.121266	-1.04917	0.2941	0.550751
Georgenia sp. ZLJ0423	135.6078	-0.38962	0.371293	-1.04935	0.294015	0.550751
Mycobacterium sp. QIA-37	28.64242	-1.11406	1.060259	-1.05074	0.293377	0.550751
Acetobacterium sp. KB-1	4.840995	-1.21507	1.159258	-1.04814	0.294574	0.551133
Sphingobium herbicidovorans	34.4484	-0.67842	0.647692	-1.04745	0.294894	0.551448
Porphyromonas asaccharolytica	1412.78	0.846463	0.80847	1.046995	0.295102	0.551554
Aquaspirillum sp. LM1	40.89723	-0.54793	0.523507	-1.04664	0.295265	0.551575
Streptomyces sp. S8	23.87847	-0.73789	0.706881	-1.04386	0.296549	0.553336
Mycobacteroides chelonae	604.4024	-0.69652	0.667396	-1.04364	0.296653	0.553336

<i>Chromohalobacter salexigens</i>	31.17292	-0.51851	0.496844	-1.04361	0.296664	0.553336
<i>Staphylococcus virus IPLAC1C</i>	221.4976	-1.96231	1.884218	-1.04145	0.297668	0.554642
<i>Bacillus krulwichiae</i>	9.90698	-1.11012	1.065861	-1.04152	0.297634	0.554642
<i>Lactobacillus delbrueckii</i>	46.63198	-0.58113	0.558992	-1.03961	0.298522	0.554813
<i>Pseudarthrobacter phenanthrenivora</i>	172.8365	-0.4339	0.417203	-1.04002	0.29833	0.554813
<i>Prosthecochloris sp. CIB 2401</i>	4.996364	-1.5789	1.518301	-1.03991	0.298381	0.554813
<i>Streptococcus constellatus</i>	52.53185	-0.66805	0.64244	-1.03987	0.298401	0.554813
<i>Paludibacter propionigenes</i>	13.81098	-1.05865	1.01707	-1.04088	0.297929	0.554813
<i>Streptococcus sanguinis</i>	2186.705	-0.64279	0.618855	-1.03868	0.298955	0.55505
<i>Pseudomonas veronii</i>	35.83389	-1.08601	1.045279	-1.03896	0.298822	0.55505
<i>Gordonia sp. YC-JH1</i>	246.0929	-0.45233	0.435718	-1.03812	0.299215	0.555249
<i>Geobacter metallireducens</i>	40.92748	-0.60587	0.583969	-1.0375	0.299503	0.5555
<i>Bartonella apis</i>	16.34091	-0.84794	0.818101	-1.03648	0.29998	0.555536
<i>Pseudomonas sp. R3-52-08</i>	1.861025	-2.98557	2.880004	-1.03665	0.299897	0.555536
<i>Sneathia amnii</i>	9.719828	-1.05852	1.020975	-1.03677	0.299841	0.555536
<i>Methylobacterium sp. XJLW</i>	60.27152	-1.18961	1.148837	-1.03549	0.300442	0.556107
<i>Corynebacterium sp. NML98-0116</i>	2608.284	0.450246	0.435829	1.033079	0.301567	0.556774
<i>Serratia plymuthica</i>	55.9319	0.55979	0.541819	1.033168	0.301525	0.556774
<i>Confluentimicrobium sp. EMB200-NS</i>	44.72249	-0.60728	0.587277	-1.03406	0.30111	0.556774
<i>Pseudomonas sp. URMO17WK12:l11</i>	54.17575	-0.69529	0.672786	-1.03344	0.301396	0.556774
<i>Rhodococcus sp. PBTS 1</i>	529.9866	0.53423	0.51669	1.033947	0.301161	0.556774
<i>Gemmatimonas phototrophica</i>	32.19833	-0.58997	0.572244	-1.03098	0.302552	0.557927
<i>Calothrix parasitica</i>	20.87227	1.128287	1.094612	1.030765	0.302651	0.557927
<i>Ruminococcus champanellensis</i>	21.94951	-1.18054	1.144802	-1.03121	0.30244	0.557927
<i>Nostoc piscinale</i>	5.620581	-1.87486	1.822136	-1.02893	0.303511	0.558927
<i>Lysinibacillus fusiformis</i>	8.24201	-1.25304	1.21894	-1.02798	0.30396	0.558927
<i>Desulfobacter postgatei</i>	2.289406	-1.44439	1.404551	-1.02837	0.303778	0.558927
<i>Citrobacter koseri</i>	28.04444	-0.64136	0.62391	-1.02797	0.303962	0.558927
<i>Ruminococcus albus</i>	15.69305	1.078562	1.048252	1.028915	0.30352	0.558927
<i>Spirochaeta thermophila</i>	18.89525	-0.71929	0.700224	-1.02723	0.304311	0.559286
archaeon AArc-SI	6.173191	-1.10716	1.078199	-1.02686	0.304485	0.559324
<i>Lacinutrix venerupis</i>	8.57526	1.442368	1.405349	1.026342	0.304731	0.559493
<i>Streptococcus acidominimus</i>	17.25153	-1.05613	1.029529	-1.02583	0.30497	0.559649
<i>cyanobacterium endosymbiont of Epi</i>	3.310266	2.573998	2.511	1.025089	0.305321	0.560012
<i>Lactobacillus acidophilus</i>	13.02391	1.251653	1.221415	1.024756	0.305478	0.560018
<i>Congregibacter litoralis</i>	4.350903	-1.64056	1.604221	-1.02265	0.306474	0.561277
<i>Edwardsiella hoshinae</i>	18.33571	-0.94238	0.921217	-1.02297	0.306322	0.561277
<i>Cellulomonas gilvus</i>	126.8789	-0.47832	0.468262	-1.02149	0.307025	0.561451
<i>Citrobacter werkmanii</i>	22.2301	-1.12288	1.098812	-1.0219	0.306827	0.561451
<i>Nostoc flagelliforme</i>	10.09987	1.209477	1.184054	1.021471	0.307031	0.561451
<i>Human alphaherpesvirus 1</i>	10.98618	-2.63767	2.584002	-1.02077	0.307364	0.561778
<i>Haloarcula taiwanensis</i>	1.948919	-2.10412	2.063131	-1.01987	0.307792	0.562277
<i>Isosphaera pallida</i>	12.18421	-0.75334	0.739534	-1.01867	0.308362	0.563035
<i>Lactobacillus rhamnosus</i>	35.74869	-0.65783	0.646463	-1.01758	0.308875	0.56369
<i>Streptococcus porcinus</i>	9.559314	-0.94225	0.92642	-1.01708	0.309113	0.563842
<i>Pseudomonas sp. LG1E9</i>	68.74451	-0.60289	0.594606	-1.01393	0.310615	0.564036
<i>Shewanella sp. Pdp11</i>	1.555133	-2.72842	2.686374	-1.01565	0.309795	0.564036
<i>Actinopolymorpha singaporensis</i>	86.78809	-0.40583	0.400079	-1.01437	0.310408	0.564036
<i>Methylovorus sp. MP688</i>	7.241994	-1.46223	1.440121	-1.01535	0.309939	0.564036
<i>Halothermothrix orenii</i>	4.334251	1.54017	1.516693	1.015479	0.309877	0.564036

<i>Pasteurella dagmatis</i>	4.82381	-1.29727	1.276962	-1.0159	0.309675	0.564036
<i>Arcobacter trophiarum</i>	7.09504	1.496624	1.476007	1.013968	0.310598	0.564036
<i>Streptomyces</i> sp. CNQ-509	75.30359	-0.54268	0.535093	-1.01418	0.310497	0.564036
<i>Haemophilus influenzae</i>	188.0538	-0.68657	0.676368	-1.01508	0.310068	0.564036
<i>Neisseria</i> sp. 10022	28.83259	-0.84937	0.8382	-1.01333	0.310904	0.564278
<i>Methanocella conradii</i>	1.33565	-2.51175	2.486527	-1.01014	0.312427	0.5661
<i>Pseudomonas cremoricolorata</i>	45.63354	-0.53899	0.533557	-1.01019	0.312405	0.5661
<i>Aeromonas</i> sp. ASNIH1	1.772669	-2.91949	2.889494	-1.01038	0.312313	0.5661
<i>Campylobacter sputorum</i>	14.13277	1.138323	1.127494	1.009604	0.312685	0.5661
<i>Synechococcus</i> sp. JA-3-3Ab	49.74262	-0.76525	0.757757	-1.00988	0.312551	0.5661
<i>Rhodobacter blasticus</i>	75.41778	-0.47179	0.468003	-1.00808	0.313415	0.566494
<i>Veillonella parvula</i>	3651.678	-0.56073	0.556297	-1.00796	0.313473	0.566494
<i>Eggerthella</i> sp. YY7918	10.7749	-1.15347	1.144854	-1.00753	0.313681	0.566494
<i>Streptomyces lavendulae</i>	64.50023	-0.43975	0.436375	-1.00774	0.313578	0.566494
<i>Francisella philomiragia</i>	12.89619	1.590479	1.57696	1.008573	0.313179	0.566494
<i>Oceanicoccus sagamiensis</i>	4.744129	-1.25073	1.24496	-1.00464	0.315071	0.56844
<i>Kosakonia sacchari</i>	14.15541	-0.91179	0.907525	-1.0047	0.31504	0.56844
<i>Flavobacterium anhuiense</i>	52.34574	-0.71614	0.71318	-1.00415	0.315306	0.568583
<i>Lawsonia intracellularis</i>	5.592127	-1.3804	1.376838	-1.00258	0.316062	0.56923
<i>Gramella</i> sp. SH35	6.552088	-1.20884	1.20591	-1.00243	0.316135	0.56923
<i>Aurantimicrobium</i> sp. MWH-Mo1	35.32553	-0.61089	0.609096	-1.00295	0.315886	0.56923
<i>Lactobacillus casei</i>	12.05899	-1.09468	1.092431	-1.00206	0.316314	0.569236
<i>Aquimarina</i> sp. AD1	8.857398	1.328226	1.325868	1.001778	0.316451	0.569236
<i>Candidatus Aquiluna</i> sp. UB-Maderos	7.170471	-0.82419	0.824098	-1.00012	0.317255	0.5704
<i>Defluviitoga tunisiensis</i>	1.997856	2.415488	2.417086	0.999339	0.317631	0.570794
<i>Cycloclasticus</i> sp. PY97N	1.770436	-2.91102	2.914245	-0.99889	0.317846	0.570899
<i>Propionibacterium virus PHL070N00</i>	12.49941	-1.30445	1.30858	-0.99685	0.31884	0.572401
<i>Actinomyces gaoshouyui</i>	104.4826	-0.36365	0.365019	-0.99625	0.319128	0.572636
<i>Asaia bogorensis</i>	10.46221	-0.73959	0.742817	-0.99566	0.319415	0.572869
<i>Lactobacillus paragasseri</i>	4.155291	-2.10563	2.118539	-0.99391	0.320268	0.574115
<i>Rathayibacter toxicus</i>	26.73726	-0.47805	0.481257	-0.99334	0.320545	0.574329
<i>Neisseria sicca</i>	407.4594	-0.77917	0.784793	-0.99284	0.320788	0.574482
<i>Vibrio alginolyticus</i>	5.347166	-1.18324	1.192417	-0.99231	0.321048	0.574666
<i>Clostridium ljungdahlii</i>	1.725938	-2.88157	2.907107	-0.99122	0.32158	0.575334
<i>Enterobacter</i> sp. FY-07	15.50693	-0.77549	0.782717	-0.99076	0.321801	0.575447
<i>Candidatus Gracilibacteria bacterium</i>	2.049368	2.40035	2.423695	0.990368	0.321994	0.575509
<i>Clostridiaceae bacterium 14S0207</i>	18.88378	0.89886	0.910594	0.987114	0.323587	0.578071
<i>Thermus thermophilus</i>	65.79469	-0.58461	0.592935	-0.98596	0.324152	0.578514
<i>Plantactinospora</i> sp. BC1	67.0779	-0.67027	0.679754	-0.98605	0.324107	0.578514
<i>Microcystis</i> sp. MC19	2.396422	-2.18826	2.222517	-0.98458	0.324828	0.579126
<i>Microlunatus soli</i>	110.343	-0.41711	0.423507	-0.98491	0.32467	0.579126
<i>Calothrix</i> sp. NIES-2100	18.57516	1.225219	1.244773	0.984291	0.324972	0.579126
<i>Pseudomonas corrugata</i>	36.56537	-0.81021	0.823919	-0.98337	0.325427	0.579652
<i>Corynebacterium minutissimum</i>	48405.4	-0.26313	0.267774	-0.98267	0.32577	0.579978
<i>Haloterrigena daqingensis</i>	14.12092	-0.95311	0.970266	-0.98231	0.325945	0.580007
<i>Bacillus butanolivorans</i>	13.29358	-0.87624	0.892718	-0.98155	0.326323	0.580396
<i>Capnocytophaga cynodegmi</i>	5.425351	1.341529	1.367984	0.980661	0.32676	0.580605
<i>Ruminococcaceae bacterium CPB6</i>	21.52327	-0.78668	0.802048	-0.98084	0.326674	0.580605
<i>Marinifilaceae bacterium SPP2</i>	10.91752	0.963857	0.983432	0.980096	0.327039	0.580817
<i>Olleya aquimaris</i>	8.350581	1.450212	1.482513	0.978212	0.327969	0.582185

<i>Alcanivorax dieselolei</i>	74.74695	-0.57924	0.592734	-0.97723	0.328456	0.582713
<i>Streptomyces nigra</i>	63.77807	-0.41551	0.425305	-0.97696	0.328587	0.582713
<i>Cyanothece</i> sp. ATCC 51142	5.424656	1.596438	1.637225	0.975088	0.329516	0.583225
<i>Bifidobacterium thermophilum</i>	27.73949	0.488249	0.50053	0.975463	0.329331	0.583225
<i>Modestobacter marinus</i>	257.6073	-0.47333	0.485395	-0.97515	0.329486	0.583225
<i>Dactylococcopsis salina</i>	2.457832	-2.15384	2.207094	-0.97587	0.329128	0.583225
<i>Rufibacter</i> sp. DG31D	12.25622	-0.98361	1.009163	-0.97468	0.32972	0.583302
<i>Spiroplasma alleghenense</i>	2.42321	2.323329	2.388673	0.972644	0.33073	0.584804
<i>Micromonospora</i> sp. WMMA2032	76.62419	-0.50187	0.516184	-0.97228	0.330913	0.584843
<i>Haloterrigena turkmenica</i>	29.23659	-0.53112	0.546959	-0.97103	0.331532	0.585653
<i>Melissococcus plutonius</i>	12.41026	1.186795	1.22302	0.970381	0.331857	0.585658
[<i>Eubacterium</i>] <i>minutum</i>	12.22121	-1.0939	1.127257	-0.9704	0.331845	0.585658
<i>Magnetococcus marinus</i>	2.095392	-1.83851	1.895302	-0.97004	0.332028	0.585677
<i>Prevotella jejuni</i>	439.5349	-0.51571	0.53209	-0.96922	0.332435	0.58611
<i>Natrialba magadii</i>	9.90679	-0.97278	1.004395	-0.96852	0.332783	0.586439
<i>Pseudomonas pohangensis</i>	35.99804	-0.66562	0.688054	-0.96739	0.333349	0.587152
<i>Capnocytophaga ochracea</i>	55.31321	-0.80748	0.837311	-0.96437	0.33486	0.589528
<i>Chryseobacterium gallinarum</i>	31.08977	-0.75987	0.788321	-0.9639	0.335094	0.589655
<i>Borrelia hermsii</i>	4.656661	2.056907	2.136376	0.962802	0.335647	0.590343
<i>Corynebacterium casei</i>	1544.238	-0.27373	0.284693	-0.96149	0.336304	0.591212
<i>Pseudomonas viridiflava</i>	50.09441	0.602741	0.627322	0.960815	0.336645	0.591526
<i>Carnobacterium maltaromaticum</i>	78.88651	-0.61918	0.64495	-0.96005	0.337031	0.591919
<i>Kingella kingae</i>	16.61741	-0.87802	0.916195	-0.95833	0.337894	0.593109
<i>Arthrobacter alpinus</i>	290.9038	-0.29946	0.312589	-0.95801	0.338058	0.593109
<i>Rufibacter</i> sp. DG15C	7.898214	-1.11025	1.159252	-0.95773	0.338198	0.593109
<i>Actinoalloteichus hoggarensis</i>	112.8712	-0.40619	0.424729	-0.95634	0.3389	0.594054
<i>Verrucosipora maris</i>	92.9681	-0.45693	0.478263	-0.95539	0.33938	0.59461
<i>Cytophaga hutchinsonii</i>	29.30318	0.805202	0.844163	0.953846	0.340162	0.595692
<i>Pseudomonas</i> sp. TMW 2.1634	22.58609	-1.23497	1.297838	-0.95156	0.341322	0.596041
<i>Actinomyces meyeri</i>	368.1986	-0.44981	0.473216	-0.95055	0.341835	0.596041
<i>Saprospira grandis</i>	1.942142	-1.97144	2.073301	-0.95087	0.34167	0.596041
<i>Halodesulfurarchaeum formicicum</i>	2.743146	-1.35985	1.427467	-0.95263	0.340775	0.596041
<i>Parascardovia denticolens</i>	103.9194	-0.60017	0.63108	-0.95102	0.341595	0.596041
<i>Jiangella</i> sp. DSM 45060	160.9683	-0.37643	0.39503	-0.95291	0.340634	0.596041
<i>Methylobacterium phyllosphaerae</i>	69.8064	-0.85792	0.901829	-0.95131	0.341446	0.596041
<i>Rhodothermaceae bacterium</i>	56.87635	-0.63281	0.665404	-0.95102	0.341594	0.596041
<i>Geobacillus subterraneus</i>	2.302408	-2.2951	2.413991	-0.95075	0.341731	0.596041
<i>Haemophilus pittmaniae</i>	49.99471	-0.7055	0.742861	-0.9497	0.342263	0.596152
<i>Pediococcus clausenii</i>	3.870378	-1.64659	1.733315	-0.94996	0.34213	0.596152
<i>Arthrobacter</i> sp. YC-RL1	189.6826	-0.3813	0.401603	-0.94945	0.34239	0.596152
<i>Exiguobacterium</i> sp. AT1b	52.26777	-0.81012	0.855493	-0.94697	0.343655	0.597211
<i>Amphibacillus xylanus</i>	4.334334	-1.34334	1.41732	-0.9478	0.343231	0.597211
<i>Pseudomonas</i> sp. Leaf58	44.93541	-0.49796	0.525812	-0.94703	0.343626	0.597211
<i>Propionibacterium phage PHL150M01</i>	9.197266	-1.52393	1.608437	-0.94746	0.343405	0.597211
<i>Teredinibacter turnerae</i>	10.01548	-0.8554	0.903695	-0.94656	0.343863	0.597288
<i>Virgibacillus</i> sp. Bac332	10.53496	-1.07578	1.13707	-0.9461	0.344096	0.597289
<i>Sphingobium</i> sp. MI1205	28.78013	-0.71549	0.756401	-0.94591	0.344192	0.597289
<i>Sphaerospermopsis kisseleviana</i>	7.050099	1.480344	1.565549	0.945575	0.344365	0.597305
<i>Tessaracoccus flavus</i>	91.07117	-0.50917	0.539246	-0.94422	0.345055	0.598216
<i>Rhodococcus hoagii</i>	214.7415	-0.32726	0.346893	-0.94339	0.345481	0.59867

Streptococcus sp. I-P16	90.83723	-0.75877	0.805226	-0.9423	0.346037	0.599348
Brucella sp. 09RB8910	5.515648	-1.70788	1.813919	-0.94154	0.346427	0.599661
Methanosarcina sp. MTP4	3.389043	2.02892	2.155428	0.941307	0.346547	0.599661
Thermodesulfobium narugense	1.419261	2.608238	2.773024	0.940575	0.346923	0.600024
Christensenella sp. Marseille-P3954	21.26788	-0.7466	0.794116	-0.94016	0.347136	0.600099
Gluconobacter oxydans	39.40281	-0.70158	0.74648	-0.93985	0.347295	0.600099
Corynebacterium terpenotabidum	392.867	-0.39818	0.423953	-0.9392	0.347628	0.600389
Cryobacterium arcticum	105.5593	-0.44488	0.473846	-0.93888	0.347794	0.60039
Lactococcus virus 712	1.567865	-2.74136	2.922261	-0.93809	0.348196	0.600514
Thermobispora bispora	80.90345	-0.41639	0.44377	-0.93831	0.348086	0.600514
Corynebacterium epidermidicanis	726.095	-0.28729	0.306587	-0.93707	0.348722	0.601137
Maribacter sp. 1_2014MBL_MicDiv	1.567786	-2.73711	2.922274	-0.93664	0.348945	0.601236
Cellulosimicrobium sp. TH-20	173.9058	-0.46163	0.49385	-0.93475	0.349915	0.601768
Corynebacterium urealyticum	1687.874	-0.35294	0.377241	-0.93559	0.349487	0.601768
Aeromonas rivipollensis	16.1013	-0.92105	0.985206	-0.93488	0.34985	0.601768
Chondrocystis sp. NIES-4102	21.00528	-0.74235	0.794127	-0.9348	0.349893	0.601768
Novosphingobium sp. P6W	82.86915	-0.42852	0.459167	-0.93325	0.350693	0.6026
Clostridiales bacterium CCNA10	88.18871	-0.62439	0.669102	-0.93317	0.35073	0.6026
Lactobacillus koreensis	1.403435	-2.55775	2.743293	-0.93237	0.351148	0.603033
Rhodococcus sp. MTM3W5.2	161.4778	-0.36939	0.396755	-0.93102	0.351842	0.60394
Enterococcus sp. FDAARGOS_375	2.560032	-2.4321	2.614927	-0.93008	0.352328	0.60449
Alloactinosynnema sp. L-07	124.0243	-0.39503	0.424917	-0.92967	0.35254	0.604569
Roseovarius sp. TM1035	4.805766	-1.70338	1.836851	-0.92734	0.353751	0.6046
Pseudomonas extremaustralis	36.13917	-0.52376	0.564714	-0.92747	0.353682	0.6046
Shewanella putrefaciens	2.801539	-2.40064	2.583601	-0.92918	0.352794	0.6046
Micromonospora rifamycinica	54.04763	-0.45395	0.488797	-0.92871	0.353038	0.6046
Bacillus halodurans	2.132008	-1.76291	1.899942	-0.92787	0.353473	0.6046
Enterobacter sp. SA187	21.27334	-0.72967	0.785934	-0.92841	0.353195	0.6046
Rhodococcus sp. p52	148.2449	-0.8333	0.898846	-0.92707	0.353888	0.6046
Clostridium scatologenes	14.30515	1.071601	1.154786	0.927965	0.353426	0.6046
Prevotella ruminicola	40.79041	-0.49004	0.52895	-0.92643	0.354221	0.604681
Jeotgalibacillus malaysiensis	5.676057	-1.11047	1.198769	-0.92634	0.354268	0.604681
Methylobacterium sp. C1	160.0264	-0.66232	0.716001	-0.92502	0.354954	0.605152
Rahnella sp. ERMR1:05	35.26145	-0.57856	0.625463	-0.92502	0.354957	0.605152
Gryllotalpicola sp. 2DFW10M-5	106.2372	-0.41889	0.452925	-0.92485	0.355043	0.605152
Segniliparus rotundus	81.11026	-0.44388	0.480484	-0.92381	0.355585	0.605287
Pseudomonas sp. SWI36	1.522622	-2.69953	2.92239	-0.92374	0.355621	0.605287
Actinoalloteichus hymeniacidonis	75.78246	-0.4944	0.535119	-0.92391	0.355531	0.605287
Streptomyces violaceusniger	45.29308	-0.54888	0.595516	-0.92168	0.356695	0.606548
Bifidobacterium longum	681.6319	-0.502	0.544529	-0.9219	0.356579	0.606548
Methylocystis bryophila	62.42441	-0.60575	0.657643	-0.92109	0.357002	0.606786
Streptococcus respiraculi	14.21763	-0.79406	0.862746	-0.92038	0.357372	0.607132
Opiritatus terrae	40.76503	-0.46653	0.507097	-0.92	0.357571	0.607187
Pseudomonas taetrolens	35.52954	-0.61939	0.674389	-0.91844	0.358386	0.608287
Miniimonas sp. S16	155.2263	-0.42712	0.465246	-0.91805	0.35859	0.608323
Nostoc punctiforme	23.29145	1.223093	1.332686	0.917765	0.358742	0.608323
Microbacterium sp. CGR1	55.27082	-0.86502	0.944782	-0.91557	0.35989	0.609986
Mycoplasma bovirhinis	2.925487	2.552079	2.79359	0.913548	0.360954	0.611505
Synechocystis sp. PCC 6714	1.491668	-2.66648	2.922495	-0.9124	0.36156	0.612245
Xenorhabdus poinarii	2.070929	-2.03496	2.23156	-0.9119	0.361822	0.612404

<i>Clostridium drakei</i>	10.68261	1.343558	1.473921	0.911554	0.362004	0.612427
<i>Dermabacter vaginalis</i>	1232.017	-0.35829	0.394855	-0.90739	0.364201	0.612581
<i>Acinetobacter equi</i>	18.23494	0.900504	0.990851	0.908819	0.363445	0.612581
Staphylococcus phage BP39	1.471158	-2.64958	2.922549	-0.9066	0.36462	0.612581
Propionibacterium phage Moyashi	10.22334	-1.65615	1.823137	-0.90841	0.363663	0.612581
<i>Arthrobacter</i> sp. ATCC 21022	110.0737	-0.71841	0.792383	-0.90664	0.364597	0.612581
<i>Corynebacterium doosanense</i>	1305.688	-0.30291	0.332894	-0.90992	0.362866	0.612581
<i>Arthrobacter</i> sp. ZXY-2	112.562	-0.70291	0.774484	-0.90758	0.364099	0.612581
<i>Streptomyces</i> sp. MOE7	23.04392	-0.92103	1.013023	-0.90919	0.36325	0.612581
<i>Kordia</i> sp. SMS9	7.763178	1.265416	1.389615	0.910623	0.362494	0.612581
<i>Arcanobacterium phocae</i>	31.83363	-0.49345	0.542622	-0.90938	0.363151	0.612581
<i>Erysipelothrix</i> sp. 15TAL0474	2.003288	-1.73663	1.908135	-0.91012	0.36276	0.612581
<i>Rhodovulum</i> sp. MB263	68.73372	-0.52222	0.575688	-0.90712	0.364342	0.612581
<i>Lelliottia</i> sp. WB101	13.46635	-0.74056	0.814134	-0.90963	0.363017	0.612581
<i>Tenericutes bacterium</i> MO-XQ	7.209333	1.253835	1.381509	0.907584	0.364098	0.612581
<i>Gallionella capsiferriformans</i>	24.04221	-0.51844	0.570331	-0.90902	0.363341	0.612581
<i>Thermus aquaticus</i>	5.449088	-1.01073	1.11564	-0.90596	0.364957	0.612864
<i>Enterococcus gilvus</i>	7.973496	-1.04994	1.160686	-0.90459	0.365684	0.613785
<i>Bacillus gobiensis</i>	3.323436	-1.17754	1.302176	-0.90429	0.365842	0.613785
<i>Paenibacillus odorifer</i>	4.940715	-1.07064	1.184422	-0.90394	0.366029	0.613815
Propionibacterium virus PHL025M00	16.56262	-1.2316	1.363387	-0.90334	0.366348	0.614067
<i>Streptococcus australis</i>	157.7643	-0.50557	0.559912	-0.90294	0.366556	0.614133
<i>Desulfomonile tiedjei</i>	2.421686	-1.29237	1.431805	-0.90262	0.36673	0.614142
<i>Tenacibaculum jejuense</i>	11.56519	1.179274	1.307021	0.902261	0.366918	0.614174
<i>Staphylococcus felis</i>	44.91745	0.530418	0.588438	0.9014	0.367375	0.614253
<i>Collinsella aerofaciens</i>	321.9694	-0.58307	0.646978	-0.90122	0.367471	0.614253
<i>Octadecabacter antarcticus</i>	13.40356	-0.95043	1.05389	-0.90183	0.367147	0.614253
Betapapillomavirus 2	22.68281	-1.21911	1.353989	-0.90038	0.367917	0.614715
<i>Deinococcus geothermalis</i>	29.58726	-0.4656	0.517724	-0.89932	0.368482	0.615377
<i>Bacillus marisflavi</i>	9.752048	-0.8818	0.982213	-0.89777	0.369307	0.616189
<i>Campylobacter pinnipediorum</i>	11.09152	1.044007	1.162655	0.897951	0.369212	0.616189
<i>Aeromicrobium choanae</i>	217.4656	-0.47494	0.529439	-0.89706	0.369686	0.616539
<i>Paraoskovia marina</i>	71.69945	-0.36425	0.406791	-0.89543	0.370555	0.617704
<i>Mycetocola</i> sp. 449	71.37169	-0.31717	0.354635	-0.89435	0.371132	0.618384
<i>Lactobacillus crustorum</i>	5.024966	-1.19915	1.341394	-0.89396	0.371345	0.618455
Staphylococcus virus PH15	167.0586	1.098304	1.229131	0.893561	0.371557	0.618525
<i>Methanofollis liminatans</i>	16.4448	-0.69581	0.779161	-0.89303	0.371842	0.618716
Propionibacterium virus Attacne	62.39474	1.272234	1.425852	0.892262	0.372252	0.618731
<i>Halorhabdus utahensis</i>	3.168076	-1.35941	1.523789	-0.89212	0.372327	0.618731
<i>Methanocella arvoryzae</i>	3.211199	-1.67577	1.878873	-0.8919	0.372445	0.618731
<i>Hymenobacter</i> sp. PAMC 26554	109.2777	-0.50533	0.566673	-0.89174	0.372531	0.618731
<i>Paenibacillus</i> sp. CAA11	4.686387	-1.16301	1.306512	-0.89016	0.373379	0.619856
<i>Nitrososphaera viennensis</i>	1.42148	-2.59771	2.92272	-0.8888	0.374111	0.620789
<i>Pseudomonas koreensis</i>	197.9224	-0.51142	0.576048	-0.88781	0.374643	0.621089
<i>Amycolatopsis</i> sp. BJA-103	80.10327	-0.41754	0.47049	-0.88747	0.374828	0.621089
<i>Aeromonas</i> sp. ASNIH4	4.998515	-1.42228	1.603122	-0.88719	0.374975	0.621089
<i>Pseudomonas</i> sp. CCOS 191	38.17279	-0.70059	0.789237	-0.88768	0.374714	0.621089
Candidatus Planktophila limnetica	3.67713	1.641811	1.858612	0.883354	0.377045	0.623652
<i>Paenibacillus</i> sp. 320-W	15.90991	-0.72648	0.82268	-0.88306	0.377204	0.623652
<i>Corynebacterium singulare</i>	6452.026	-0.28742	0.325484	-0.88305	0.377208	0.623652

Oscillibacter valericigenes	20.83307	-0.98049	1.109882	-0.88342	0.377012	0.623652
Deinococcus gobiensis	72.67843	-0.43863	0.497193	-0.8822	0.377666	0.624127
Euzebya sp. DY32-46	80.99152	-0.34816	0.39545	-0.88041	0.378638	0.625449
Fronduhabitans sp. PAMC 28766	169.5761	-0.3753	0.42737	-0.87816	0.379859	0.62564
Betapapillomavirus 3	57.3316	-2.0652	2.349758	-0.8789	0.379455	0.62564
Bartonella ancashensis	1.733144	-2.2066	2.514853	-0.87743	0.380254	0.62564
Paracoccus zhejiangensis	231.3749	-0.48104	0.548048	-0.87773	0.380088	0.62564
Staphylococcus virus IPLA5	112.0623	0.954634	1.087647	0.877706	0.380103	0.62564
Bacillus licheniformis	1.267658	-2.43561	2.774224	-0.87794	0.379974	0.62564
Sphingobacterium mizutaii	20.1734	-0.70794	0.806917	-0.87734	0.380301	0.62564
Halobacterium hubeiense	14.24599	-0.54694	0.621992	-0.87934	0.379216	0.62564
Sporosarcina sp. PTS2304	2.773234	-1.92441	2.191435	-0.87815	0.379861	0.62564
Friedmanniella sagamiharensis	314.1627	-0.4744	0.541364	-0.8763	0.380865	0.625743
Nostoc sp. CENA543	11.97487	-1.18509	1.352099	-0.87648	0.380768	0.625743
Shewanella psychrophila	2.196396	-1.65703	1.890995	-0.87628	0.38088	0.625743
Corynebacterium deserti	561.6222	-0.27857	0.318051	-0.87587	0.381098	0.62582
Neisseria lactamica	75.18637	-0.69554	0.798802	-0.87073	0.383901	0.62626
Sphingobium baderi	87.22743	-0.49236	0.565924	-0.87002	0.384291	0.62626
Azospira oryzae	208.175	-0.54838	0.629924	-0.87055	0.384001	0.62626
Escherichia marmotae	5.229234	-1.59802	1.834735	-0.87098	0.383765	0.62626
Thioclava nitratireducens	59.2516	-0.49742	0.568902	-0.87434	0.381932	0.62626
[Clostridium] cellulosi	6.759717	-1.2295	1.413084	-0.87008	0.384257	0.62626
Mesorhizobium huakuii	53.35646	-0.84128	0.962229	-0.87431	0.381951	0.62626
Streptococcus sp. FDAARGOS_192	133.5481	0.655365	0.75082	0.872865	0.382737	0.62626
Aeromonas sp. ASNIH2	1.36569	-2.5445	2.922902	-0.87054	0.384006	0.62626
Pelosinus fermentans	9.571519	-0.87632	1.003524	-0.87325	0.382528	0.62626
Enterobacter asburiae	37.04842	-0.67867	0.778254	-0.87204	0.383187	0.62626
Legionella pneumophila	44.11284	0.448457	0.514536	0.871575	0.38344	0.62626
Pseudoalteromonas translucida	5.888332	2.11773	2.434488	0.869887	0.384362	0.62626
Propionibacterium virus P100D	22.26535	1.278565	1.47012	0.869701	0.384464	0.62626
Fusobacterium periodonticum	164.2814	-0.43029	0.493038	-0.87273	0.38281	0.62626
Sphingopyxis terrae	53.58384	-0.55602	0.638466	-0.87087	0.383823	0.62626
Syntrophus aciditrophicus	3.608564	-1.07755	1.232212	-0.87448	0.381855	0.62626
Methylobacterium sp. 17SD2-17	145.6556	-0.44363	0.507901	-0.87346	0.382414	0.62626
Hymenobacter sp. APR13	56.49022	-0.39991	0.460068	-0.86924	0.384718	0.626393
Sulfurihydrogenibium sp. YO3AOP1	1.831398	1.951865	2.247518	0.868454	0.385146	0.62681
Bacillus cellulosityticus	6.991013	-0.93543	1.079354	-0.86666	0.386127	0.628126
Candidatus Protochlamydia amoebophila	1.791231	-1.96996	2.278538	-0.86457	0.387274	0.629428
Bacteroides fragilis	316.6454	-0.584	0.675378	-0.8647	0.387202	0.629428
Prosthecochloris sp. HL-130-GSB	2.635969	-1.50119	1.739178	-0.86316	0.388049	0.630407
Paenibacillus sp. FSL H7-0357	14.25972	-0.73475	0.852362	-0.86202	0.388679	0.630586
Desulfobacca acetoxidans	9.806172	-0.81815	0.948967	-0.86215	0.388604	0.630586
Spirosoma radiotolerans	21.82047	-0.59873	0.694378	-0.86225	0.388551	0.630586
Pseudomonas tolaasii	34.76768	-0.56086	0.652629	-0.85939	0.390125	0.631788
Serratia sp. FS14	1.335715	-2.51115	2.923019	-0.85909	0.390288	0.631788
Rhodococcus phage RRH1	1.246904	-2.40584	2.797833	-0.85989	0.389848	0.631788
Sulfitobacter sp. SK012	8.276197	-0.76602	0.891528	-0.85923	0.390216	0.631788
Aerococcaceae bacterium ZY16052	24.99166	-0.75933	0.882834	-0.86011	0.389729	0.631788
Exiguobacterium sibiricum	13.93188	0.947299	1.108673	0.854444	0.392859	0.632172
Pseudomonas sp. XWY-1	23.99933	-0.9541	1.11466	-0.85596	0.39202	0.632172

Dechloromonas aromatica	59.20896	-0.36475	0.425979	-0.85626	0.391853	0.632172
Solibacillus sp. R5-41	11.88477	-0.76791	0.900149	-0.85309	0.393607	0.632172
Providencia alcalifaciens	7.982461	-1.11368	1.30575	-0.85291	0.393711	0.632172
Lactococcus virus P008	5.500747	-1.58082	1.846158	-0.85627	0.391847	0.632172
Syntrophobotulus glycolicus	1.208913	-2.37073	2.786397	-0.85082	0.394869	0.632172
Oceanobacillus kimchii	8.121762	1.015085	1.183162	0.857942	0.390924	0.632172
Alistipes finegoldii	114.5128	-0.55017	0.646473	-0.85103	0.394754	0.632172
Halostagnicola larsenii	11.42217	-0.95015	1.113228	-0.85351	0.393376	0.632172
Paenibacillus physcomitrellae	7.496986	-0.91619	1.071615	-0.85496	0.392571	0.632172
Methanococcoides methylutens	1.681367	-1.94981	2.29111	-0.85103	0.394752	0.632172
Pseudoalteromonas carrageenovora	1.71556	-2.14439	2.507065	-0.85534	0.392363	0.632172
Paenibacillaceae bacterium GAS479	4.593149	-0.99846	1.171845	-0.85204	0.394192	0.632172
Pseudomonas sp. DR 5-09	24.60057	-0.73746	0.859288	-0.85822	0.390773	0.632172
Staphylococcus virus IPLA7	152.2537	0.924703	1.085753	0.85167	0.394397	0.632172
Roseiflexus sp. RS-1	16.41701	-0.64136	0.751544	-0.85339	0.393443	0.632172
Liberibacter crescens	1.926846	-1.78999	2.095703	-0.85412	0.393037	0.632172
Citrobacter freundii complex sp. CFNI	3.509445	1.82277	2.132583	0.854724	0.392704	0.632172
Hymenobacter swuensis	59.51459	0.45479	0.532012	0.85485	0.392634	0.632172
Thermacetogenium phaeum	5.157711	-1.14429	1.343166	-0.85193	0.394252	0.632172
Streptococcus ruminantium	11.17325	-0.85373	1.002458	-0.85164	0.394414	0.632172
Mycobacterium haemophilum	68.85783	-0.36766	0.430726	-0.85358	0.393338	0.632172
Halobacillus mangrovi	5.801286	-1.00483	1.17307	-0.85658	0.391676	0.632172
Bacillus atrophaeus	2.177068	-2.09538	2.447578	-0.8561	0.391941	0.632172
Thioalkalivibrio paradoxus	38.35283	-0.54883	0.646412	-0.84904	0.395857	0.633197
Tetragenococcus koreensis	6.114375	-1.08983	1.283195	-0.84931	0.395708	0.633197
Streptosporangium sp. 'caverna'	97.78072	-0.3644	0.42964	-0.84814	0.396359	0.633443
Xenorhabdus bovienii	12.77937	-0.77962	0.918876	-0.84845	0.396188	0.633443
Formosa agariphila	12.41099	0.905743	1.068421	0.84774	0.396583	0.633522
Streptococcus parauberis	14.46649	-0.68814	0.813173	-0.84624	0.397417	0.634577
Phycococcus dokdonensis	238.1388	-0.42632	0.504986	-0.84422	0.398546	0.635245
Haloferax volcanii	11.75165	-0.70014	0.828589	-0.84498	0.398123	0.635245
Finegoldia magna	7273.933	-0.32886	0.389678	-0.84393	0.398708	0.635245
Flavobacterium arcticum	9.87135	0.928468	1.099378	0.84454	0.398368	0.635245
Arthrobacter sp. ERGS1:01	154.7132	-0.30984	0.367016	-0.84421	0.39855	0.635245
Spiroplasma apis	5.17317	1.567739	1.860078	0.842835	0.39932	0.635942
Neisseriaceae bacterium DSM 100970	5.157171	-1.08085	1.283073	-0.84239	0.399569	0.636059
Corynebacterium jeikeium	12047.78	-0.33587	0.399269	-0.8412	0.400234	0.636611
Fischerella sp. NIES-3754	15.20903	0.97691	1.161403	0.841147	0.400266	0.636611
Paraglaciecola psychrophila	6.990968	-1.37377	1.634469	-0.8405	0.400629	0.63691
Halalkalicoccus jeotgali	19.9526	-0.55368	0.659853	-0.8391	0.401412	0.637457
Treponema azotonutricium	2.638406	-1.18126	1.40802	-0.83895	0.401498	0.637457
Pseudoalteromonas donghaensis	7.314569	-1.39789	1.665396	-0.83937	0.401261	0.637457
Sinorhizobium sp. RAC02	93.42887	-0.47698	0.568814	-0.83855	0.40172	0.637531
Gordonia iterans	294.3666	-0.42767	0.510825	-0.83722	0.402471	0.638263
Cronobacter universalis	4.837907	-1.4264	1.703992	-0.83709	0.402542	0.638263
Proteus mirabilis	32.18888	0.651057	0.778036	0.836796	0.402707	0.638263
Rhodococcus rhodochrous	151.2529	-0.38842	0.465351	-0.83468	0.403897	0.63848
Francisella haliotica	3.73352	1.562428	1.871335	0.834927	0.403759	0.63848
Pseudomonas umsongensis	38.21039	-0.53541	0.641392	-0.83476	0.40385	0.63848
Psychrobacter sp. P11G3	34.69336	-0.66536	0.796092	-0.83579	0.403275	0.63848

<i>Spirosoma montaniterrae</i>	10.98725	-0.65652	0.786282	-0.83496	0.403738	0.63848
<i>Propionibacterium phage QueenBey</i>	5.67296	-1.76185	2.109269	-0.83529	0.403554	0.63848
<i>Lactobacillus pentosus</i>	13.71086	-0.68711	0.823859	-0.83402	0.404271	0.638793
<i>Chryseobacterium indoltheticum</i>	81.80578	-0.53142	0.638447	-0.83237	0.405202	0.639988
<i>Cellvibrio sp. PSBB023</i>	16.01061	-0.52889	0.63678	-0.83058	0.406214	0.640674
<i>Nostoc sphaeroides</i>	7.042522	1.537095	1.849179	0.831231	0.405843	0.640674
<i>Bacillus clausii</i>	9.198546	-0.84788	1.021108	-0.83035	0.406341	0.640674
<i>Deinococcus actinosclerus</i>	87.3922	-0.37586	0.452392	-0.83083	0.406072	0.640674
<i>Sphingopyxis sp. WS5A3p</i>	55.44458	-0.43169	0.521595	-0.82764	0.407875	0.642084
<i>Gordonia phthalatica</i>	199.6358	-0.33401	0.403628	-0.82752	0.407941	0.642084
<i>Ilyobacter polytropus</i>	6.510066	1.069605	1.291899	0.827932	0.407709	0.642084
<i>Microbacterium hominis</i>	304.0497	-0.49392	0.596765	-0.82766	0.407863	0.642084
<i>Flavobacterium commune</i>	24.64321	-0.70188	0.848861	-0.82685	0.408319	0.642401
<i>Paracoccus contaminans</i>	551.0446	-0.42144	0.510057	-0.82626	0.408659	0.642423
<i>Candidatus Endolissoclinum faulkneri</i>	3.211325	1.673599	2.025641	0.826207	0.408686	0.642423
<i>Dickeya sp. NCPPB 3274</i>	5.312766	-1.40927	1.707166	-0.8255	0.409088	0.642669
<i>Allokutzneria albata</i>	151.0935	-0.30025	0.36394	-0.825	0.409373	0.642669
<i>Clostridium sp. JN500901</i>	9.536915	0.925249	1.121313	0.825148	0.409288	0.642669
<i>Streptomyces ambofaciens</i>	76.5264	-0.3614	0.438233	-0.82467	0.409556	0.64268
<i>Agarivorans gilvus</i>	2.665162	-1.34788	1.636463	-0.82365	0.410137	0.643148
<i>Staphylococcus lugdunensis</i>	2286.063	0.430487	0.522917	0.82324	0.410372	0.643148
<i>Rhodococcus coprophilus</i>	125.2692	-0.50871	0.618106	-0.82301	0.4105	0.643148
<i>Micromonospora sp. L5</i>	1.238018	-2.40569	2.923408	-0.82291	0.410561	0.643148
<i>Nitrosococcus oceani</i>	7.078687	-0.89822	1.092638	-0.82207	0.411039	0.643482
<i>Dichelobacter nodosus</i>	3.609689	-1.06048	1.290259	-0.82191	0.411128	0.643482
<i>Geminocystis sp. NIES-3709</i>	14.53007	0.984828	1.200625	0.820263	0.412066	0.644396
<i>Pseudomonas oryzihabitans</i>	227.3771	-0.41526	0.506136	-0.82044	0.411963	0.644396
<i>Clostridioides difficile</i>	430.682	0.386081	0.471265	0.819243	0.412648	0.645028
<i>Methylovulum psychrotolerans</i>	10.61876	-0.87874	1.074345	-0.81793	0.413395	0.645919
<i>Corynebacterium kutscheri</i>	189.4875	-0.30733	0.37597	-0.81743	0.413681	0.646088
<i>Piscirickettsia salmonis</i>	9.572768	0.876186	1.072352	0.81707	0.413889	0.646135
<i>Leptolyngbya sp. NIES-3755</i>	1.436775	-1.91892	2.356159	-0.81443	0.4154	0.646986
<i>Mariprofundus aestuarium</i>	2.38724	-1.43623	1.763867	-0.81425	0.415501	0.646986
<i>Desulfohalobium retbaense</i>	3.353673	-1.15644	1.418537	-0.81524	0.414938	0.646986
<i>Altererythrobacter sp. ZODW24</i>	8.547323	-0.69432	0.852149	-0.81478	0.415196	0.646986
<i>Desulfitobacterium metallireducens</i>	3.990476	-1.22053	1.496141	-0.81579	0.414623	0.646986
<i>Exiguobacterium sp. ZWU0009</i>	9.438092	-2.33259	2.863901	-0.81448	0.415369	0.646986
<i>Klebsiella variicola</i>	34.8201	-0.76857	0.944822	-0.81345	0.415958	0.647421
<i>Chryseobacterium sp. H3001</i>	14.47718	-0.94037	1.157949	-0.8121	0.416736	0.647842
<i>Aurantimicrobium minutum</i>	15.40946	-0.73888	0.91006	-0.8119	0.416847	0.647842
<i>Gramella sp. MAR_2010_147</i>	5.490272	-1.17135	1.443013	-0.81174	0.416941	0.647842
<i>Paenibacillus sp. JDR-2</i>	4.020585	-0.92648	1.140987	-0.812	0.416792	0.647842
<i>Acinetobacter sp. TGL-Y2</i>	15.8775	0.693345	0.854534	0.811372	0.417152	0.647894
<i>Haloarcula marismortui</i>	1.212637	-2.37061	2.923544	-0.81087	0.417442	0.648068
<i>Psychrobacter sp. PRwf-1</i>	32.78678	0.984328	1.214747	0.810316	0.417759	0.648283
<i>Lactobacillus kunkeei</i>	2.453916	-1.43813	1.77725	-0.80919	0.418406	0.648542
<i>Pseudomonas libanensis</i>	25.04628	0.77016	0.951166	0.809702	0.418112	0.648542
<i>Mixta gaviniae</i>	38.82489	-0.45083	0.557209	-0.8091	0.41846	0.648542
<i>Methanobrevibacter sp. AbM4</i>	4.128045	1.520153	1.880071	0.808561	0.418768	0.648742
<i>Streptococcus infantarius</i>	31.37093	-0.92512	1.146304	-0.80704	0.419642	0.649543

Kosakonia sp. CCTCC M2018092	10.27175	-0.93982	1.164343	-0.80716	0.419572	0.649543
Weissella koreensis	5.154469	-1.18339	1.467823	-0.80622	0.420114	0.649721
Curtobacterium sp. MR_MD2014	162.8535	-0.40874	0.506833	-0.80647	0.419972	0.649721
Sporosarcina psychrophila	11.95402	-0.89572	1.112067	-0.80545	0.420558	0.649929
Frondihabitans sp. 762G35	131.6161	-0.43449	0.539491	-0.80537	0.420605	0.649929
Campylobacter hepaticus	2.685192	1.642727	2.044904	0.803327	0.421786	0.651476
Corynebacterium imitans	2664.723	-0.27526	0.34358	-0.80116	0.423038	0.652907
Bacteroides zoogloeformans	64.64623	-0.72383	0.903543	-0.8011	0.423071	0.652907
Candidatus Planktophila dulcis	19.92264	-0.68395	0.855049	-0.7999	0.423771	0.653434
Streptococcus gordonii	6588.896	-0.45006	0.562456	-0.80016	0.423617	0.653434
Streptomyces sp. 769	54.91286	-0.44983	0.563155	-0.79877	0.424423	0.653742
Arcobacter molluscorum	12.78883	1.054188	1.319364	0.799012	0.424283	0.653742
Geobacillus sp. GHH01	0.409908	2.348605	2.940827	0.798621	0.42451	0.653742
Lactobacillus murinus	2.39827	-1.50967	1.892396	-0.79776	0.425011	0.654236
Campylobacter iguaniorum	3.566503	1.606621	2.020886	0.795008	0.426609	0.655587
Pseudarthrobacter sulfonivorans	120.72	-0.28451	0.357835	-0.79509	0.426561	0.655587
Thiohalobacter thiocyanaticus	39.98188	-0.45093	0.566608	-0.79584	0.426123	0.655587
Dietzia psychralcaliphila	440.4166	-0.44221	0.55596	-0.7954	0.426379	0.655587
Pseudomonas sp. LBUM920	70.78862	0.407281	0.512821	0.794197	0.427081	0.656035
Microterricola viridarii	212.5075	-0.32668	0.411582	-0.79371	0.427363	0.6561
Pseudomonas sp. B10	33.64115	-0.78092	0.984138	-0.79351	0.427484	0.6561
Bacteroides caccae	89.90589	-0.7595	0.957784	-0.79298	0.427789	0.656292
Neisseria cinerea	70.95717	-0.66025	0.833822	-0.79184	0.428456	0.657038
Streptococcus sp. JS71	108.2019	-0.64221	0.811825	-0.79107	0.428901	0.657444
Vibrio sp. HBUAS61001	5.942956	1.02714	1.29976	0.790253	0.42938	0.657507
Chloroflexus aggregans	11.40297	-0.92308	1.168302	-0.7901	0.429469	0.657507
Staphylococcus saprophyticus	571.7729	0.402909	0.509963	0.790075	0.429484	0.657507
Bacillus safensis	6.948055	-1.03692	1.313607	-0.78937	0.429897	0.657862
Polynucleobacter duraquae	1.915512	-1.29769	1.644823	-0.78896	0.430137	0.657953
Photobacterium profundum	7.971392	-1.17143	1.485424	-0.78862	0.430337	0.657981
Desulfurispirillum indicum	6.918093	-0.80203	1.017675	-0.7881	0.430638	0.658165
Acidithiobacillus ferrivorans	13.87344	-0.82673	1.049863	-0.78746	0.431011	0.658458
Lactobacillus mucosae	2.685892	-1.28189	1.628706	-0.78706	0.431247	0.658544
Candidatus Coxiella mudrowiae	2.591226	-1.29291	1.643882	-0.7865	0.431577	0.65877
Bacteroides heparinolyticus	127.6704	-0.59429	0.757055	-0.785	0.432451	0.659828
Rhizobium sp. TAL182	1.145974	-2.29383	2.923852	-0.78452	0.432734	0.659982
Cyanobacterium aponinum	4.844115	1.070801	1.370997	0.781038	0.43478	0.662126
Microbacterium sp. XT11	126.6224	-0.42662	0.546179	-0.78109	0.434748	0.662126
Porphyromonas crevioricanis	20.83327	-0.68818	0.881626	-0.78058	0.435049	0.662126
Paracoccus aminovorans	217.9782	-0.46137	0.590176	-0.78175	0.434363	0.662126
Oscillibacter sp. PEA192	95.959	-0.55146	0.706221	-0.78086	0.434882	0.662126
Myroides profundus	0.76939	2.284856	2.932685	0.7791	0.435921	0.662985
Propionibacterium virus PHL095N00	22.74493	-1.16679	1.497803	-0.779	0.435978	0.662985
Rahnella sp. Y9602	8.38705	2.249694	2.895901	0.776855	0.437245	0.664634
Pediococcus inopinatus	1.875359	-1.48373	1.914745	-0.77489	0.438402	0.665085
Pararhodospirillum photometricum	49.93049	-0.45933	0.592702	-0.77498	0.438349	0.665085
Bacillus sp. FJAT-42376	6.350918	-0.88925	1.148331	-0.77439	0.438702	0.665085
Glaciecola nitratireducens	1.683174	-1.78389	2.306253	-0.7735	0.439226	0.665085
Wenyngzhuangia fucanilytica	9.339081	0.878222	1.136195	0.77295	0.439552	0.665085
Vibrio rotiferianus	0.928714	2.265052	2.929029	0.773311	0.439338	0.665085

Saccharomonospora glauca	95.71061	-0.39193	0.505432	-0.77543	0.438083	0.665085
Streptomyces collinus	60.76435	-0.37795	0.48726	-0.77567	0.437943	0.665085
Rhodococcus sp. NJ-530	159.5397	-0.68978	0.890451	-0.77465	0.438549	0.665085
Luteipulveratus mongoliensis	158.6147	-0.31706	0.409737	-0.77382	0.439039	0.665085
Corynebacterium timonense	2066.647	-0.32894	0.425539	-0.773	0.43952	0.665085
Bifidobacterium catenulatum	40.2839	0.577585	0.747673	0.772511	0.439812	0.665202
Candidatus Atelocyanobacterium tha	3.799913	1.437871	1.862964	0.771819	0.440222	0.665545
Capnocytophaga haemolytica	11.17117	-0.90709	1.177257	-0.77051	0.440995	0.666161
Thalassolituus oleivorans	8.142277	-0.82952	1.076471	-0.77059	0.440952	0.666161
Propionibacterium virus P100A	8.033207	-1.43231	1.860556	-0.76983	0.441402	0.666499
Flexistipes sinusarabici	2.22763	-1.58907	2.067534	-0.76858	0.442143	0.667063
Corynebacterium atypicum	940.0356	-0.27834	0.362098	-0.76869	0.442076	0.667063
Brevundimonas vesicularis	315.8913	-0.41977	0.546875	-0.76758	0.442736	0.667405
Filifactor alocis	81.88294	-0.47859	0.6234	-0.76771	0.442658	0.667405
Mycobacterium sp. DL90	152.5637	-0.33348	0.434722	-0.76712	0.443011	0.667543
Streptomyces xinghaiensis	72.92124	-0.29401	0.38402	-0.76562	0.443904	0.668335
Xanthomonas euvesicatoria	41.9197	-0.61262	0.800038	-0.76573	0.443835	0.668335
Lactobacillus parabuchneri	4.627313	1.347804	1.761717	0.765052	0.444241	0.668566
Edwardsiella tarda	21.40947	-0.87302	1.142588	-0.76407	0.444823	0.669061
Rhodobacteraceae bacterium QY30	72.81384	-0.42748	0.559839	-0.76357	0.445122	0.669061
Bacillus anthracis	64.68836	1.420713	1.860589	0.763583	0.445116	0.669061
Enterobacter cloacae	364.8547	-0.37096	0.486115	-0.76311	0.4454	0.669204
Lactobacillus paraplantarum	2.016285	-1.7208	2.256102	-0.76273	0.445622	0.669261
Mycobacterium sp. WY10	28.46186	-0.62832	0.824461	-0.7621	0.445999	0.669551
Mycobacterium leprae	29.41949	-0.45738	0.600616	-0.76152	0.446349	0.669799
Tessaracoccus flavescens	222.543	-0.3347	0.440046	-0.7606	0.446893	0.67034
Corynebacterium kroppenstedtii	34999.38	-0.58379	0.770011	-0.75816	0.448357	0.672259
Lactobacillus backii	15.4149	-0.79921	1.058082	-0.75534	0.450045	0.67407
Streptomyces sp. ZFG47	74.20755	-0.31903	0.422129	-0.75576	0.449793	0.67407
Rothia dentocariosa	6827.861	-0.53101	0.703415	-0.7549	0.450306	0.67407
Calyptogenia okutanii thioautotrophic	2.824137	-1.25036	1.656119	-0.755	0.450251	0.67407
Streptomyces pactum	55.65874	-0.38296	0.50751	-0.75458	0.450502	0.674086
Klebsiella aerogenes	43.53047	-0.43972	0.584148	-0.75276	0.451593	0.67544
Actinobacillus pleuropneumoniae	7.786188	-1.0516	1.3984	-0.75201	0.452048	0.675843
Exiguobacterium sp. U13-1	11.84849	-1.21584	1.618433	-0.75125	0.452505	0.676248
Clostridium septicum	18.82252	0.648944	0.867635	0.747946	0.454493	0.678122
Anabaena sp. 90	2.762526	-1.30683	1.74542	-0.74872	0.454026	0.678122
Lysinibacillus sp. YS11	15.31178	-0.88437	1.181848	-0.74829	0.454285	0.678122
Actinopolyspora erythraea	77.72995	-0.26113	0.349141	-0.74793	0.454504	0.678122
Methylobacterium sp. 17Sr1-43	154.7247	-0.37164	0.49751	-0.74699	0.455069	0.678409
Sphingobacterium sp. B29	45.81993	0.798581	1.068688	0.747254	0.45491	0.678409
endosymbiont of Acanthamoeba sp. I	1.393722	-1.76707	2.36764	-0.74634	0.455461	0.678475
Mycobacterium sp. PYR15	33.68801	-0.7711	1.033226	-0.7463	0.455486	0.678475
Enterococcus faecium	161.1993	-0.45214	0.60826	-0.74333	0.457284	0.680875
Acetohalobium arabaticum	3.298603	1.209548	1.635701	0.739467	0.459623	0.683038
Gammapapillomavirus 22	1.053148	-2.16527	2.924407	-0.74041	0.45905	0.683038
Melioribacter roseus	2.265137	-1.31103	1.77156	-0.74004	0.459275	0.683038
Polymorphum gilvum	99.18902	-0.37296	0.504425	-0.73938	0.459676	0.683038
Shewanella violacea	1.767353	-2.04387	2.763613	-0.73956	0.459564	0.683038
Desulfobacula toluolica	2.161133	-1.06516	1.442061	-0.73863	0.460129	0.683432

<i>Bacillus thermoamylovorans</i>	6.022102	-0.80001	1.084862	-0.73743	0.460862	0.684242
<i>Pseudomonas alkylphenolica</i>	82.62542	-0.39072	0.530898	-0.73597	0.461752	0.685283
<i>Lacinutrix</i> sp. 5H-3-7-4	13.30361	0.792152	1.078156	0.734728	0.462505	0.685478
<i>Propionibacterium</i> virus PHL113M01	22.25839	-1.06332	1.44588	-0.73541	0.462087	0.685478
<i>Pseudomonas entomophila</i>	69.95245	-0.41235	0.561393	-0.73451	0.462637	0.685478
<i>Pontibacter korensis</i>	10.2289	-0.67832	0.923398	-0.73459	0.462587	0.685478
<i>Vibrio azureus</i>	2.396003	1.765224	2.406406	0.733552	0.463222	0.686066
<i>Tatlockia micdadei</i>	0.909736	-1.95582	2.669197	-0.73274	0.463718	0.686522
<i>Gammapapillomavirus</i> 19	1.82535	1.993399	2.722035	0.732319	0.463974	0.686621
<i>Betapapillomavirus</i> 1	407.8851	-0.87292	1.193545	-0.73137	0.464554	0.6872
<i>Leuconostoc carnosum</i>	70.38419	-0.79943	1.093748	-0.73091	0.464835	0.687337
<i>Capnocytophaga</i> sp. ChDC OS43	91.13369	-0.48451	0.663179	-0.73059	0.465031	0.687347
<i>Rhodococcus</i> sp. B7740	232.2377	-0.31333	0.429232	-0.72998	0.4654	0.687612
<i>Bacteroides ovatus</i>	160.8985	-0.54794	0.751149	-0.72947	0.465712	0.687795
<i>Capnocytophaga</i> sp. oral taxon 323	57.22811	-0.58755	0.807614	-0.72751	0.466911	0.689006
<i>Paenibacillus riograndensis</i>	7.079615	-0.93953	1.290977	-0.72777	0.466757	0.689006
<i>Corynebacterium diphtheriae</i>	2747.963	-0.21209	0.292042	-0.72624	0.467692	0.689879
<i>Brachybacterium</i> sp. VR2415	304.0947	-0.37016	0.51075	-0.72473	0.468615	0.69096
<i>Pseudomonas fluorescens</i>	1385.37	-0.34141	0.471605	-0.72393	0.469107	0.691361
<i>Bacteroides salanitronis</i>	38.80631	-0.6289	0.869042	-0.72367	0.469267	0.691361
<i>Pseudomonas</i> sp. S09G 359	56.06538	-0.49721	0.688075	-0.72261	0.46992	0.692044
<i>Streptococcus iniae</i>	11.90219	-0.65896	0.912719	-0.72198	0.470308	0.692334
<i>Leuconostoc citreum</i>	30.76021	-0.82266	1.141753	-0.72052	0.471205	0.693374
<i>Acetobacter tropicalis</i>	1.005213	-2.10341	2.924692	-0.71919	0.472023	0.694297
<i>Alteromonas naphthalenivorans</i>	2.028538	-1.48697	2.069077	-0.71866	0.472348	0.694495
<i>Cronobacter sakazakii</i>	48.67261	-0.53722	0.748251	-0.71797	0.472778	0.694846
<i>Halothece</i> sp. PCC 7418	3.269286	-1.02979	1.435954	-0.71714	0.473285	0.69531
<i>Odoribacter splanchnicus</i>	87.4004	0.621014	0.868025	0.715434	0.474341	0.695738
<i>Marinilactibacillus</i> sp. 15R	13.4387	-0.69048	0.964173	-0.71613	0.473908	0.695738
<i>Haemophilus parainfluenzae</i>	1347.882	-0.47977	0.670413	-0.71563	0.474219	0.695738
<i>Actinomyces radidentis</i>	226.9808	-0.2881	0.402496	-0.71578	0.474129	0.695738
<i>Lactobacillus terrae</i>	3.54135	-1.08857	1.523829	-0.71437	0.475	0.696425
<i>Streptomyces violaceoruber</i>	49.39765	-0.3999	0.560194	-0.71387	0.47531	0.696598
<i>Streptomyces</i> sp. CLI2509	9.604099	-1.29942	1.824865	-0.71206	0.476425	0.69721
<i>Paeniclostridium sordellii</i>	27.67157	0.481705	0.676597	0.711953	0.476494	0.69721
<i>Kytococcus sedentarius</i>	515.1872	-0.3243	0.455379	-0.71216	0.476368	0.69721
<i>Streptococcus</i> phage PH10	9.575587	-1.17304	1.647209	-0.71214	0.476381	0.69721
<i>Brevibacterium linens</i>	284.6662	-0.29927	0.420544	-0.71163	0.476693	0.69722
<i>Thermosiphon africanus</i>	3.001126	1.678122	2.361721	0.710551	0.477363	0.69792
<i>Pseudomonas pseudoalcaligenes</i>	258.7223	-0.49557	0.697764	-0.71023	0.477563	0.697931
<i>Polaribacter</i> sp. SA4-12	11.94907	0.916837	1.291759	0.709759	0.477854	0.697931
<i>Methanobrevibacter olleyae</i>	4.774358	1.338237	1.886697	0.709301	0.478137	0.697931
<i>Mycobacterium marinum</i>	76.2301	0.412847	0.582005	0.709354	0.478105	0.697931
<i>Sediminicola</i> sp. YIK13	4.68777	-0.95807	1.351506	-0.70889	0.478393	0.698024
<i>Actinomyces</i> sp. VUL4_3	48.60402	-0.27745	0.391742	-0.70825	0.478788	0.698029
<i>Nitrosomonas europaea</i>	5.417099	-0.92682	1.309147	-0.70796	0.478972	0.698029
<i>Simonsiella muelleri</i>	26.98963	-0.78951	1.114835	-0.70819	0.478828	0.698029
<i>Arthrobacter</i> sp. YN	112.9266	-0.25439	0.359838	-0.70694	0.479601	0.698667
<i>Mycobacterium</i> sp. YC-RL4	202.2977	-0.37081	0.524967	-0.70636	0.479966	0.698918
<i>Clostridium estertheticum</i>	39.79746	0.581722	0.824203	0.7058	0.480313	0.699016

Chryseobacterium sp. IHB B 17019	26.83237	0.552904	0.784246	0.705014	0.480802	0.699016
Rickettsiales endosymbiont of Stachy	2.720174	1.560375	2.211658	0.705523	0.480485	0.699016
Virgibacillus sp. Bac330	2.02898	-1.4687	2.082381	-0.7053	0.480624	0.699016
Labrenzia aggregata	14.38336	-0.83197	1.181693	-0.70405	0.481404	0.699332
Neosasia Chiangmaiensis	27.68192	-0.41135	0.584161	-0.70418	0.481323	0.699332
Jiangella alkaliphila	175.4567	-0.33594	0.477661	-0.70331	0.481862	0.699718
Enterococcus sp. CR-Ec1	0.973985	-2.05371	2.924929	-0.70214	0.482591	0.700498
Chryseobacterium camelliae	17.55884	-0.55004	0.784132	-0.70147	0.483012	0.700829
Enterobacter roggkampii	19.81114	0.829007	1.186729	0.698564	0.484824	0.702643
Pseudomonas sp. Lz4W	19.37159	-0.84592	1.210978	-0.69854	0.484839	0.702643
Corynebacterium frankenforstense	1530.471	-0.25396	0.363553	-0.69854	0.484841	0.702643
Streptococcus suis	164.3046	0.335002	0.479841	0.698152	0.485082	0.702712
Methylobacterium alcaliphilum	4.232578	-0.93577	1.342149	-0.69722	0.485668	0.703281
Paraphotobacterium marinum	8.662997	0.747905	1.073331	0.696808	0.485923	0.703371
Acinetobacter sp. ACNIH1	92.74564	-0.51088	0.734375	-0.69567	0.486637	0.703852
Lachnoanaerobaculum umeaense	54.05362	-0.46886	0.673978	-0.69566	0.486642	0.703852
Citrobacter freundii complex sp. CFNI	0.958393	-2.03011	2.925045	-0.69404	0.487655	0.705036
Synechococcus lividus	6.970613	-1.01293	1.462552	-0.69258	0.488576	0.705252
Methylothermobacter versatilis	8.594958	-0.77024	1.111954	-0.69269	0.488503	0.705252
Lactococcus lactis	2131.945	-0.44846	0.647532	-0.69257	0.488579	0.705252
Pseudomonas arsenicoxydans	49.64418	0.473997	0.683973	0.693005	0.488306	0.705252
Tatumella ptyseos	5.216202	-1.11804	1.616476	-0.69165	0.489155	0.705804
Acinetobacter sp. WCHA55	136.3566	0.440392	0.637115	0.691229	0.489422	0.705903
Pseudomonas amygdali	0.954604	-2.02102	2.92509	-0.69093	0.489612	0.705903
Hymenobacter sp. DG25B	46.83717	-0.35068	0.508457	-0.68969	0.490392	0.706747
Haliscomenobacter hydrossis	25.11901	0.347739	0.505537	0.68786	0.491541	0.70793
Gordonibacter massiliensis	32.92568	-0.45473	0.661167	-0.68776	0.491602	0.70793
Oscillatoria nigro-viridis	19.04608	0.641752	0.934177	0.686971	0.492101	0.708369
Parachlamydia acanthamoebae	2.076727	-1.55862	2.271342	-0.68621	0.49258	0.708777
Sphingomonas sp. LM7	104.4312	-0.34816	0.507927	-0.68546	0.493052	0.709177
Dietzia sp. JS16-p6b	265.7111	-0.29723	0.433827	-0.68514	0.493256	0.709189
Streptococcus merionis	13.16407	-0.515	0.752399	-0.68447	0.493676	0.709234
Pseudomonas sp. LPH1	53.67574	-0.45432	0.663492	-0.68474	0.493508	0.709234
Rhodococcus sp. H-CA8f	145.5396	0.706475	1.033304	0.683705	0.494161	0.70965
Selenomonas ruminantium	11.39011	-0.57881	0.848325	-0.68229	0.495054	0.710651
Pseudomonas sp. FDAARGOS_380	153.1698	0.506631	0.743041	0.681834	0.495344	0.710787
Aerococcus urinae	56.47565	-0.40583	0.595936	-0.68099	0.495877	0.711272
Aquimarina sp. AD10	13.77941	0.670383	0.985908	0.679965	0.496527	0.711865
Vibrio cholerae	25.79309	-0.59551	0.876513	-0.67941	0.496877	0.711865
Citrobacter rodentium	11.06608	-0.77624	1.142008	-0.67971	0.496685	0.711865
Pelosinus sp. UFO1	9.576209	0.850184	1.253047	0.678493	0.497459	0.712418
Candidatus Sodalis pierantonius	2.512673	-1.62526	2.40012	-0.67716	0.498306	0.71335
Mucilaginibacter sp. HYN0043	36.28659	0.449408	0.664609	0.676199	0.498914	0.71394
Pseudomonas sp. NS1(2017)	36.84899	-0.46581	0.690076	-0.67501	0.49967	0.714261
Aurantimicrobium sp. MWH-Uga1	14.73102	-0.65606	0.972054	-0.67492	0.499727	0.714261
Pantoea vagans	206.2773	-0.4424	0.654968	-0.67545	0.49939	0.714261
Cellulophaga baltica	7.554012	0.843348	1.25088	0.674204	0.500182	0.71463
Mycoplasma cynos	1.533124	1.700209	2.523082	0.673862	0.500399	0.714659
Ruminococcus bicirculans	102.2923	-0.5934	0.88208	-0.67272	0.501123	0.715137
Tenacibaculum todarodis	7.073986	0.992583	1.475481	0.672718	0.501127	0.715137

<i>Streptomyces hundungensis</i>	92.16273	-0.27288	0.406709	-0.67095	0.502254	0.716281
<i>Lactobacillus amylovorus</i>	15.13812	-0.63252	0.942878	-0.67084	0.502322	0.716281
<i>Bacillus</i> sp. 1NLA3E	8.21128	-0.71165	1.062057	-0.67007	0.502813	0.716701
<i>Corynebacterium lactis</i>	730.9379	-0.26314	0.39293	-0.6697	0.50305	0.716757
<i>Chlorobaculum tepidum</i>	23.40651	-0.45975	0.687812	-0.66843	0.503861	0.717632
<i>Planococcus</i> sp. MB-3u-03	15.55965	-0.76893	1.151305	-0.66788	0.50421	0.717849
<i>Frischella perrara</i>	5.474661	-0.79273	1.187648	-0.66748	0.504467	0.717933
<i>Streptomyces formicae</i>	94.90176	-0.23213	0.347983	-0.66707	0.504725	0.71802
<i>Pseudodesulfovibrio profundus</i>	17.20698	-0.54838	0.823159	-0.6662	0.505286	0.718537
<i>Sphingomonas melonis</i>	408.7946	-0.39629	0.596871	-0.66394	0.50673	0.718904
<i>Selenomonas</i> sp. oral taxon 136	65.04157	-0.43869	0.660451	-0.66423	0.506545	0.718904
<i>Actinomyces pacaensis</i>	162.1109	-0.32593	0.489823	-0.66541	0.505791	0.718904
<i>Paenibacillus bovis</i>	6.914484	-0.79749	1.200983	-0.66403	0.506669	0.718904
<i>Wolinella succinogenes</i>	1.994592	-1.50532	2.26507	-0.66458	0.50632	0.718904
<i>Mycobacteroides abscessus</i>	228.7608	-0.25551	0.384421	-0.66465	0.506272	0.718904
Oscillatoriales cyanobacterium JSC-12	11.31089	-0.60742	0.915743	-0.66331	0.507133	0.718916
<i>Mahella australiensis</i>	2.917087	-1.06929	1.611992	-0.66334	0.507116	0.718916
<i>Staphylococcus simulans</i>	560.8549	-0.33944	0.512763	-0.66197	0.507988	0.719508
<i>Acetobacter ghanensis</i>	3.49819	-0.9968	1.50635	-0.66173	0.508144	0.719508
[<i>Eubacterium</i>] <i>rectale</i>	401.5116	0.497095	0.750552	0.662306	0.507775	0.719508
<i>Planktothrix agardhii</i>	2.646656	-1.06403	1.611936	-0.6601	0.509192	0.720432
<i>Pseudodesulfovibrio piezophilus</i>	1.53104	-1.41508	2.143211	-0.66026	0.509087	0.720432
<i>Gemella</i> sp. oral taxon 928	3.469306	-1.25188	1.897779	-0.65966	0.509474	0.72055
<i>Lactobacillus alimentarius</i>	2.591518	-1.07438	1.631416	-0.65855	0.510182	0.720643
<i>Novosphingobium</i> sp. THN1	74.99233	-0.31579	0.479371	-0.65876	0.510049	0.720643
<i>Curtobacterium pusillum</i>	302.1283	-0.34126	0.518878	-0.65769	0.510739	0.720643
<i>Paenicaligenes hominis</i>	4.013326	-0.88852	1.349079	-0.65862	0.510143	0.720643
<i>Legionella longbeachae</i>	1.133498	-1.60391	2.43844	-0.65776	0.510692	0.720643
<i>Cryptobacterium curtum</i>	16.09983	-0.62349	0.947713	-0.65789	0.510612	0.720643
<i>Nocardioides dokdonensis</i>	250.1406	-0.27368	0.416304	-0.6574	0.510926	0.720643
<i>Candidatus Planktophila versatilis</i>	18.1091	-0.47845	0.728548	-0.65671	0.511364	0.720703
<i>Saccharospirillum mangrovi</i>	23.37612	-0.46621	0.709589	-0.65701	0.511174	0.720703
<i>Faecalibaculum rodentium</i>	6.100522	-0.92663	1.412141	-0.65618	0.511705	0.720784
<i>Pseudomonas</i> sp. CMR5c	36.26163	0.422278	0.643707	0.656009	0.511818	0.720784
<i>Acidaminococcus intestini</i>	6.750365	0.90901	1.386436	0.655645	0.512053	0.720835
<i>Pseudomonas reinekei</i>	26.5616	0.473407	0.72551	0.652516	0.514068	0.722834
<i>Salinicoccus halodurans</i>	7.121576	-0.91152	1.396684	-0.65263	0.513995	0.722834
<i>Cyanothece</i> sp. PCC 7424	9.215098	0.860053	1.317026	0.653027	0.513739	0.722834
<i>Glutamicibacter arilaitensis</i>	136.1201	-0.25824	0.397876	-0.64906	0.516301	0.724404
<i>Shewanella frigidimarina</i>	4.436539	0.970882	1.493466	0.650086	0.515637	0.724404
<i>Staphylococcus hyicus</i>	21.08586	0.57047	0.879328	0.648757	0.516495	0.724404
<i>Staphylococcus</i> sp. SDB 2975	44.82214	-0.59031	0.910276	-0.64849	0.516665	0.724404
<i>Edwardsiella ictaluri</i>	4.202629	1.211287	1.866797	0.648858	0.51643	0.724404
[<i>Bacillus</i>] <i>selenitireducens</i>	1.644212	-1.37642	2.116143	-0.65044	0.515409	0.724404
<i>Nitrosomonas communis</i>	2.468186	-0.99135	1.529097	-0.64832	0.516777	0.724404
Idiomarinaceae bacterium HL-53	2.190246	-1.1668	1.798008	-0.64894	0.516377	0.724404
<i>Stenotrophomonas rhizophila</i>	256.3934	-0.3262	0.506815	-0.64362	0.519823	0.72821
<i>Terribacillus goriensis</i>	5.756325	-0.81728	1.270031	-0.64351	0.519893	0.72821
<i>Capnocytophaga</i> sp. oral taxon 864	45.33772	-0.43776	0.681231	-0.64261	0.52048	0.728752
<i>Xanthomonas hortorum</i>	114.8468	-0.52816	0.823545	-0.64133	0.521311	0.728794

Aerococcus viridans	42.92599	0.498236	0.776245	0.641855	0.520967	0.728794
Treponema sp. OMZ 838	32.11072	-0.59905	0.933971	-0.6414	0.521263	0.728794
Lachnoclostridium phocaeense	34.6815	-0.67228	1.046923	-0.64215	0.520778	0.728794
Kocuria turfanensis	743.763	-0.28588	0.44673	-0.63995	0.522206	0.729765
Paracoccus aminophilus	84.20594	-0.33162	0.518913	-0.63906	0.522786	0.730295
Halanaerobium praevalens	8.587103	0.603206	0.944639	0.638557	0.523111	0.730469
Vibrio campbellii	11.49169	0.818395	1.284455	0.637153	0.524025	0.731464
Staphylococcus muscae	23.95894	-0.47091	0.740845	-0.63564	0.525009	0.732557
Alkaliphilus oremlandii	9.514207	0.705271	1.110301	0.635207	0.525293	0.732672
Pseudomonas sp. R4-34-07	1.450778	1.851161	2.917499	0.634503	0.525753	0.732892
Exiguobacterium sp. N4-1P	9.376413	-0.69788	1.100153	-0.63435	0.525853	0.732892
Streptococcus pantholopis	6.286155	-0.7728	1.219038	-0.63394	0.526117	0.732979
Denitrovibrio acetiphilus	1.37635	-1.25734	1.98599	-0.6331	0.526665	0.733268
Campylobacter jejuni	62.55407	0.410795	0.648956	0.633008	0.526728	0.733268
Legionella anisa	7.080389	-0.73935	1.168781	-0.63258	0.527008	0.733377
Leptotrichia sp. oral taxon 212	105.3202	-0.38049	0.602409	-0.63161	0.52764	0.733814
Glaesserella sp. 15-184	8.608459	-0.62204	0.985976	-0.63088	0.528117	0.733814
Sphingomonas sp. FARSPH	234.3145	-0.36136	0.572795	-0.63087	0.528128	0.733814
Campylobacter concisus	77.38937	-0.35414	0.560998	-0.63127	0.527866	0.733814
Pseudonocardia sp. EC080625-04	9.036939	1.82162	2.894764	0.629281	0.529165	0.734524
Syntrophothermus lipocalidus	1.652233	-1.45793	2.315557	-0.62962	0.528942	0.734524
Hymenobacter sp. PAMC 26628	90.76535	-0.33591	0.534033	-0.629	0.529346	0.734524
Gallaecimonas sp. HK-28	9.581734	-0.52988	0.842624	-0.62885	0.529447	0.734524
Cyanothece sp. PCC 7822	10.01121	0.888938	1.419302	0.626321	0.531105	0.735584
Pedobacter heparinus	29.66369	-0.40787	0.651131	-0.62639	0.531056	0.735584
Commensalibacter sp. AMU001	1.70568	1.314628	2.096037	0.627197	0.53053	0.735584
Treponema pedis	2.604947	-0.94797	1.512675	-0.62669	0.530866	0.735584
Arthrobacter sp. Rue61a	96.85705	-0.56974	0.91014	-0.62599	0.531321	0.735584
Bacteroides coprosuis	13.39316	-0.63396	1.012988	-0.62583	0.531423	0.735584
Weissella viridescens	4.213519	-1.09651	1.755666	-0.62456	0.532263	0.735627
Candidatus Thioglobus autotrophicus	5.686317	-0.86193	1.37978	-0.62469	0.532175	0.735627
Propionibacterium phage PHL067M1	18.45287	-1.01198	1.618275	-0.62534	0.531746	0.735627
Lactococcus garvieae	9.682454	-0.73827	1.181864	-0.62466	0.532191	0.735627
Actinobacteria bacterium IMCC26077	1.146977	-1.51337	2.426757	-0.62362	0.532878	0.736197
Dehalogenimonas lykanthroporepelle	1.463015	-1.23007	1.973917	-0.62316	0.533179	0.736312
Ndongobacter massiliensis	93.60641	-0.54453	0.874216	-0.62288	0.533366	0.736312
Nocardia cyriacigeorgica	312.6814	-0.21033	0.337858	-0.62253	0.533595	0.73635
Methanosarcina lacustris	1.390652	-1.60722	2.585981	-0.62151	0.534262	0.73699
Desulfosporosinus meridiei	2.482239	-1.08445	1.750631	-0.61946	0.535611	0.737755
Winogradskyella sp. PC-19	3.49069	1.023081	1.652272	0.619197	0.535787	0.737755
Staphylococcus schleiferi	59.2262	0.320722	0.51753	0.619717	0.535444	0.737755
Thalassotalea crassostreae	1.619161	-1.31664	2.125539	-0.61944	0.535626	0.737755
Hydrogenophilus thermoluteolus	33.75723	0.413462	0.668143	0.618823	0.536033	0.737755
Streptomyces sp. PAMC 26508	22.93481	-0.84668	1.368158	-0.61885	0.536017	0.737755
Mycobacterium canettii	79.47043	0.314637	0.509149	0.617968	0.536597	0.738251
Paenibacillus larvae	3.552245	-1.06852	1.737017	-0.61514	0.538459	0.738945
Fastidiosipila sanguinis	178.7338	0.370709	0.602575	0.615208	0.538418	0.738945
Mobiluncus curtisii	683.9416	-0.41636	0.675265	-0.61659	0.537508	0.738945
Shinella sp. HZN7	280.4855	-0.34151	0.555811	-0.61443	0.538928	0.738945
Nocardia sp. Y48	161.32	-0.25273	0.411257	-0.61453	0.538864	0.738945

Candidatus Arthromitus sp. SFB-rat-Y	6.131813	1.00139	1.627835	0.615167	0.538445	0.738945
Desulfurella acetivorans	3.861191	1.082515	1.758203	0.615694	0.538097	0.738945
Agromyces flavus	111.1853	-0.261	0.424586	-0.61471	0.538748	0.738945
Bacillus subtilis	249.3574	0.413314	0.672301	0.614776	0.538703	0.738945
Deinococcus swuensis	62.83771	-0.2726	0.443964	-0.61402	0.539202	0.739042
Plantactinospora sp. KBS50	88.71509	-0.30155	0.491803	-0.61314	0.539782	0.739558
Treponema denticola	37.33776	-0.49527	0.810664	-0.61094	0.541238	0.741274
Gordonia bronchialis	743.0208	-0.34922	0.57342	-0.60902	0.542511	0.7419
Acinetobacter sp. NCu2D-2	21.0708	-0.48473	0.795785	-0.60912	0.542446	0.7419
Thiomicrospira cyclica	2.167078	-1.01045	1.65774	-0.60954	0.542168	0.7419
Chryseobacterium taklimakanense	82.75904	-0.39884	0.654581	-0.60931	0.54232	0.7419
Christensenella minuta	45.01077	-0.53012	0.871568	-0.60824	0.543027	0.742328
Mogibacterium diversum	126.7431	-0.46481	0.764606	-0.60791	0.543248	0.74235
Janthinobacterium sp. B9-8	21.80201	-0.51093	0.841476	-0.60718	0.543732	0.742734
Methanohalophilus mahii	0.806388	-1.77535	2.92642	-0.60666	0.544075	0.742923
Enterococcus mundtii	13.7944	0.538862	0.889764	0.605624	0.544765	0.743585
Paenibacillus terrae	5.637258	-0.66871	1.106723	-0.60423	0.545691	0.744568
Rhizobium sp. Kim5	6.439879	-1.09922	1.82012	-0.60392	0.545894	0.744568
Bathymodiolus septemdierum thioau	1.892792	-1.38258	2.290532	-0.60361	0.546105	0.744577
Cohaesibacter sp. ES.047	14.46337	-0.38127	0.632415	-0.60287	0.546593	0.744963
Erwinia pyrifoliae	2.224806	-1.45804	2.42351	-0.60163	0.547424	0.745816
Bartonella grahamii	1.588618	-1.68799	2.80828	-0.60108	0.547789	0.746034
Streptomyces sp. WAC00288	64.52065	-0.37571	0.626573	-0.59962	0.548757	0.747073
Metakosakonia sp. MRY16-398	0.432782	1.753901	2.93782	0.597008	0.550502	0.748842
Carboxydotherrmus hydrogenoformar	1.907581	-1.14997	1.927055	-0.59675	0.550673	0.748842
Sulfurimonas gotlandica	2.506593	1.227736	2.057152	0.596813	0.550632	0.748842
Klebsiella sp. M5a1	1.530853	-1.67855	2.820514	-0.59512	0.551762	0.749762
Salmonella bongori	4.271365	-0.96256	1.616854	-0.59533	0.551624	0.749762
Methanoregula formicica	1.504174	-1.17276	1.975481	-0.59366	0.55274	0.75053
Vibrio casei	32.00065	-0.5929	0.99856	-0.59376	0.552674	0.75053
Vibrio fluvialis	16.97794	-0.46882	0.790442	-0.59311	0.553106	0.750747
Ornithinimicrobium sp. AMA3305	204.8154	-0.22552	0.382817	-0.58911	0.555787	0.754105
Bacteroides dorei	450.4151	-0.55342	0.940439	-0.58847	0.556219	0.75441
Pseudomonas putida	1839.13	-0.32394	0.551177	-0.58772	0.556721	0.754809
Pleurocapsa minor	1.578646	-1.25022	2.129784	-0.58702	0.557194	0.754887
Synechococcus sp. WH 7803	10.10851	-0.62579	1.065684	-0.58722	0.557059	0.754887
Ruegeria sp. TM1040	18.699	-0.39929	0.680965	-0.58636	0.557633	0.755201
Enterobacter cancerogenus	31.49135	-0.41959	0.718432	-0.58404	0.559193	0.757033
Psychrobacter cryohalolentis	56.6843	-0.65828	1.127737	-0.58372	0.55941	0.757044
Dialister pneumosintes	28.22709	-0.54853	0.940854	-0.58301	0.559885	0.757221
Mycoplasma canis	2.628062	1.295062	2.221734	0.582906	0.559957	0.757221
Erwinia gerundensis	118.9145	0.452463	0.778983	0.580837	0.56135	0.75826
Spiribacter salinus	12.59256	-0.37938	0.652764	-0.5812	0.561107	0.75826
Acinetobacter haemolyticus	85.99955	0.355796	0.612253	0.581125	0.561156	0.75826
Acinetobacter sp. ACNIH2	50.65853	-0.49012	0.845222	-0.57987	0.562002	0.758578
Chryseobacterium sp. G0162	7.898377	-0.73526	1.267761	-0.57997	0.561934	0.758578
Pediococcus acidilactici	4.794611	0.948127	1.636873	0.57923	0.562434	0.758803
Tenacibaculum sp. DSM 106434	9.337067	0.693604	1.197924	0.579005	0.562586	0.758803
Nostoc sp. 'Lobaria pulmonaria (5183	11.30636	-0.62832	1.087391	-0.57783	0.56338	0.759593
Enterobacteriaceae bacterium strain	7.034816	-0.70408	1.220518	-0.57687	0.564028	0.759903

Kyrpidia spormannii	1.898709	-1.42567	2.471062	-0.57695	0.563975	0.759903
Sulfurihydrogenibium azorense	1.775465	-1.33114	2.309062	-0.57649	0.564287	0.75997
Pontibacter actinarum	22.86696	-0.38982	0.678589	-0.57445	0.565664	0.760203
Saccharophagus degradans	4.926105	-0.82258	1.4307	-0.57495	0.565325	0.760203
Acidiphilium cryptum	46.75437	-0.56877	0.989489	-0.57481	0.56542	0.760203
Raoultella ornithinolytica	121.0502	-0.35453	0.616498	-0.57507	0.565241	0.760203
Propionibacterium phage PHL055NOC	21.73548	0.842576	1.466939	0.574377	0.565713	0.760203
Corynebacterium aurimucosum	9789.801	-0.18045	0.313637	-0.57534	0.565064	0.760203
[Haemophilus] ducreyi	22.67466	-0.37069	0.648585	-0.57154	0.567635	0.762222
Flavobacteriaceae bacterium UJ101	8.856605	0.654012	1.144176	0.5716	0.567593	0.762222
Virgibacillus necropolis	9.128907	-0.72373	1.268148	-0.5707	0.568206	0.762708
Sulfurovum lithotrophicum	3.115405	1.010718	1.773707	0.569833	0.568791	0.763211
endosymbiont 'TC1' of Trimyema con	6.105074	-0.68292	1.20723	-0.56569	0.571603	0.766404
Pseudomonas lurida	29.75061	-0.70131	1.239707	-0.5657	0.571596	0.766404
Psychromicrobium lacuslunae	55.80148	-0.3421	0.605067	-0.5654	0.571802	0.766404
Histophilus somni	10.50198	-0.46834	0.831494	-0.56325	0.573262	0.767012
secondary endosymbiont of Ctenaryt	0.732974	-1.64923	2.927081	-0.56344	0.573136	0.767012
Ichthyobacterium seriolicida	2.152376	1.277155	2.262921	0.564383	0.572493	0.767012
Antarctobacter heliothermus	26.04985	-0.36975	0.656893	-0.56287	0.57352	0.767012
Mycobacterium paraintracellulare	4.079462	-1.29034	2.291368	-0.56313	0.573347	0.767012
Obesumbacterium proteus	4.3028	0.862596	1.530695	0.563532	0.573073	0.767012
Synechococcus sp. JA-2-3B'a(2-13)	10.54738	-0.77497	1.383995	-0.55995	0.575514	0.769113
Clostridium formicaceticum	9.843327	0.524535	0.936249	0.560252	0.575308	0.769113
Chlorobium limicola	8.335478	-0.59282	1.060366	-0.55907	0.576116	0.769636
Streptococcus pasteurianus	9.859615	-0.77081	1.381464	-0.55796	0.576869	0.770138
Weissella ceti	1.005312	-1.53212	2.746256	-0.5579	0.576916	0.770138
Virgibacillus phasianinus	3.862828	-0.69518	1.248144	-0.55697	0.577548	0.770416
Gramella salexigens	2.127829	-0.99073	1.778517	-0.55705	0.577491	0.770416
Spirosoma pollinicola	38.39141	-0.30269	0.544495	-0.55591	0.578269	0.770642
Pseudoxanthomonas suwonensis	209.5114	-0.24104	0.433679	-0.55579	0.578352	0.770642
Pseudomonas sp. O2C 26	107.7111	-0.33921	0.610315	-0.5558	0.578348	0.770642
Haloarculaceae archaeon HArCell1	3.081985	-0.9184	1.65349	-0.55543	0.5786	0.77069
[Clostridium] bolteae	48.36464	-0.51878	0.936397	-0.55402	0.579565	0.771198
Lonsdalea britannica	5.747201	-0.75475	1.363268	-0.55363	0.579829	0.771198
Carnobacterium divergens	84.2108	-0.37302	0.673451	-0.5539	0.579648	0.771198
Leptospira biflexa	1.987933	1.249949	2.254653	0.554386	0.579315	0.771198
Butyrivibrio proteoclasticus	13.17293	0.570063	1.033552	0.551557	0.581252	0.772244
Selenomonas sp. oral taxon 478	48.62629	-0.47282	0.856942	-0.55176	0.581116	0.772244
Ammonifex degensii	6.00441	-0.67459	1.221914	-0.55207	0.580899	0.772244
Erythrobacter sp. KY5	16.32752	-0.44594	0.810009	-0.55054	0.581952	0.772294
Betapapillomavirus 5	12.65821	-0.94124	1.712455	-0.54965	0.582563	0.772294
Planococcus halocryophilus	2.931789	-1.12237	2.040672	-0.55	0.582318	0.772294
Olsenella sp. oral taxon 807	200.6657	0.389626	0.707856	0.550432	0.582023	0.772294
Sphingobium indicum	29.34344	-0.62825	1.142439	-0.54992	0.582372	0.772294
Synechococcus sp. CC9605	12.16908	-0.56794	1.032066	-0.5503	0.582114	0.772294
Chryseobacterium sp. T16E-39	16.98599	0.414887	0.757274	0.547869	0.583782	0.773433
Flavobacterium album	17.03191	-0.32659	0.596212	-0.54777	0.583847	0.773433
Bifidobacterium indicum	1.257854	-1.30622	2.39077	-0.54636	0.584818	0.774437
Stenotrophomonas maltophilia	1974.673	-0.29713	0.54423	-0.54596	0.585097	0.774524
Citrobacter farmeri	8.673483	-0.66644	1.221912	-0.54541	0.58547	0.774737

<i>Thermoanaerobacter wiegelii</i>	3.69994	1.37573	2.525856	0.544659	0.585988	0.774989
<i>Acidipropionibacterium acidipropioni</i>	206.0689	-0.2222	0.408075	-0.54452	0.586087	0.774989
<i>Lactococcus raffinolactis</i>	76.88563	-0.54056	0.993762	-0.54395	0.586473	0.775217
<i>Calothrix brevis</i>	14.23004	0.872043	1.605745	0.543077	0.587077	0.775735
<i>Ochrobactrum anthropi</i>	136.6243	-0.3747	0.69045	-0.54269	0.587344	0.775806
<i>Rhodococcus opacus</i>	303.7818	-0.21134	0.390436	-0.5413	0.588301	0.776788
<i>Flavobacterium</i> sp. MEBiC07310	6.725743	-0.77783	1.443576	-0.53882	0.59001	0.778479
<i>Dermacoccus nishinomiyaensis</i>	3971.582	0.351185	0.65164	0.538925	0.589939	0.778479
<i>Prosthecochloris aestuarii</i>	1.347581	-1.28185	2.382004	-0.53814	0.590482	0.77882
<i>Dermatophilus congolensis</i>	64.05391	-0.27648	0.515148	-0.53669	0.591479	0.779852
<i>Kocuria</i> sp. BT304	1517.833	-0.31803	0.593765	-0.53562	0.592222	0.779984
<i>Spiroplasma taiwanense</i>	1.233981	1.541584	2.877578	0.535723	0.59215	0.779984
<i>Propionibacterium virus</i> PHL199M00	4.565147	-1.00589	1.876323	-0.5361	0.591891	0.779984
<i>Natronomonas pharaonis</i>	6.011339	-0.68881	1.290018	-0.53395	0.593373	0.781217
<i>Aeromonas</i> sp. ASNIH7	2.983916	-1.3633	2.561185	-0.53229	0.594522	0.782447
<i>Salmonella enterica</i>	301.1203	0.199955	0.376751	0.530734	0.595603	0.783206
<i>Acinetobacter venetianus</i>	272.6435	-0.31082	0.586539	-0.52991	0.596172	0.783206
<i>Stenotrophomonas</i> sp. WZN-1	30.44653	-0.58853	1.109227	-0.53058	0.595713	0.783206
<i>Micrococcus luteus</i>	52575.43	-0.3101	0.585183	-0.52992	0.596168	0.783206
<i>Clostridiales bacterium</i> 70B-A	7.896172	-0.68436	1.29146	-0.52991	0.596175	0.783206
<i>Paenibacillus</i> sp. FSL P4-0081	16.89855	-0.57297	1.083798	-0.52867	0.597034	0.784052
<i>Thermoplasmatales archaeon</i> BRNA1	0.680206	-1.54636	2.927634	-0.5282	0.597364	0.784202
<i>Bacillus lentus</i>	10.95796	-0.58328	1.107925	-0.52646	0.598569	0.784875
<i>Rhodococcus jostii</i>	93.93303	-0.2405	0.457221	-0.526	0.598891	0.784875
<i>Acholeplasma laidlawii</i>	1.52212	-1.03043	1.961393	-0.52536	0.599336	0.784875
<i>Rothia mucilaginosa</i>	3759.433	-0.30891	0.587276	-0.52601	0.598885	0.784875
<i>Polaribacter</i> sp. Hel1_33_78	6.309228	0.728533	1.386934	0.525283	0.599386	0.784875
<i>Bacillus</i> sp. FJAT-22090	7.611616	0.527747	1.004294	0.52549	0.599242	0.784875
<i>Vibrio</i> sp. 2521-89	2.173273	-1.40421	2.672541	-0.52542	0.599291	0.784875
<i>Thioploca ingrica</i>	2.569972	0.992531	1.892115	0.524562	0.599888	0.785249
<i>Providencia stuartii</i>	9.24547	-0.59409	1.133506	-0.52412	0.600198	0.785373
<i>Brucella</i> sp. 141012304	1.221996	1.525621	2.919809	0.522507	0.601317	0.786338
<i>Desulfovibrio salexigens</i>	4.580803	-0.65354	1.250959	-0.52243	0.601368	0.786338
<i>Serratia</i> sp. MYb239	0.642373	1.529756	2.931499	0.521834	0.601786	0.786602
<i>Corynebacterium</i> sp. ATCC 6931	8681.033	-0.32735	0.627855	-0.52138	0.602099	0.786728
<i>Flavivirga eckloniae</i>	9.203294	0.630607	1.21668	0.518302	0.604248	0.788566
<i>Azospirillum</i> sp. M2T2B2	82.22285	-0.33636	0.649181	-0.51812	0.604372	0.788566
<i>Methylobacterium brachiatum</i>	280.3577	0.318008	0.612712	0.519018	0.603748	0.788566
<i>Pseudomonas</i> sp. LG1D9	37.55629	-0.28365	0.546985	-0.51857	0.604061	0.788566
<i>Halanaerobium hydrogeniformans</i>	8.28987	0.620526	1.198444	0.517776	0.604615	0.788599
[<i>Clostridium</i>] <i>sphenoides</i>	19.938	-0.51998	1.004949	-0.51742	0.604862	0.78864
<i>Kangiella sediminilitoris</i>	1.233782	-1.1393	2.205955	-0.51646	0.60553	0.789228
<i>Candidatus Hoaglandella endobia</i>	0.680223	1.510757	2.930725	0.515489	0.606211	0.789833
<i>Butyrivibrio hungatei</i>	10.32236	0.635001	1.233502	0.514795	0.606696	0.790092
<i>Acholeplasma oculi</i>	1.14942	-1.25172	2.432487	-0.51458	0.606844	0.790092
[<i>Clostridium</i>] <i>saccharolyticum</i>	32.4508	-0.5402	1.056293	-0.51141	0.609066	0.790731
<i>Fictibacillus arsenicus</i>	6.323016	0.661205	1.291922	0.5118	0.608791	0.790731
<i>Dokdonia</i> sp. PRO95	0.65474	-1.49822	2.927906	-0.51171	0.608857	0.790731
<i>Staphylococcus warneri</i>	2420.467	-0.22395	0.436817	-0.51269	0.608168	0.790731
<i>Aerococcus sanguinicola</i>	6.425734	-0.536	1.047623	-0.51163	0.608908	0.790731

Arthrobacter sp. PGP41	98.56671	-0.175	0.341664	-0.51219	0.608519	0.790731
Helicobacter cetorum	1.103785	-1.49924	2.922471	-0.513	0.607948	0.790731
Legionella oakridgensis	9.042147	0.617758	1.207982	0.511397	0.609073	0.790731
Pelobacter propionicus	37.07028	-0.2752	0.539597	-0.51001	0.610045	0.790928
Lactobacillus bombi	3.924182	-0.73363	1.43899	-0.50982	0.610178	0.790928
Acinetobacter sp. TTH0-4	24.11973	0.32857	0.644497	0.509808	0.610186	0.790928
Moraxella catarrhalis	31.2932	-0.50637	0.9936	-0.50963	0.610312	0.790928
Lactococcus virus bIL170	5.127352	1.093315	2.143802	0.509989	0.610059	0.790928
Propionibacterium acidifaciens	271.4243	-0.2714	0.534169	-0.50808	0.611401	0.791779
Planococcus plakortidis	7.619651	-0.79004	1.554977	-0.50807	0.611404	0.791779
Brevibacillus laterosporus	17.89921	0.361911	0.715096	0.506101	0.612786	0.793286
Methylobacterium radiotolerans	142.7882	-0.34234	0.67808	-0.50487	0.613649	0.793604
Sulfurospirillum cavolei	1.318868	-1.31307	2.600793	-0.50487	0.613649	0.793604
Trichormus variabilis	2.113338	-1.35233	2.678828	-0.50482	0.613685	0.793604
Staphylococcus nepalensis	200.0751	-0.29537	0.586246	-0.50384	0.614377	0.793642
Prevotella intermedia	873.2539	-0.23117	0.459433	-0.50316	0.614853	0.793642
Shewanella baltica	117.4825	0.402236	0.798078	0.504006	0.614257	0.793642
Geitlerinema sp. PCC 7407	31.59821	-0.35478	0.704766	-0.5034	0.61468	0.793642
Mucilaginicoccus sp. BJC16-A31	28.05238	-0.35619	0.706845	-0.50391	0.614321	0.793642
Candidatus Cyclonatronum proteinivorus	4.821915	-0.68306	1.359039	-0.50261	0.615242	0.793642
Oleispira antarctica	7.85093	-0.69306	1.37876	-0.50267	0.615197	0.793642
Stanieria sp. NIES-3757	10.08678	0.649715	1.29545	0.501536	0.615994	0.794331
Actinosynnema mirum	33.54657	-1.0715	2.147318	-0.49899	0.617783	0.794948
Campylobacter insulaenigrae	3.497808	1.022583	2.048748	0.499126	0.617691	0.794948
Propionibacterium virus P101A	20.31135	0.862013	1.726752	0.499211	0.617631	0.794948
Capnocytophaga sp. oral taxon 878	23.9279	-0.37738	0.75593	-0.49923	0.617615	0.794948
Anaerotignum propionicum	7.855003	-0.58149	1.163473	-0.49979	0.617223	0.794948
Clostridium bornimense	21.31861	0.374097	0.747659	0.500358	0.616823	0.794948
Mageeibacillus indolicus	34.95161	-0.49426	0.991806	-0.49835	0.61824	0.795032
Bifidobacterium dentium	128.5827	0.338454	0.679242	0.498282	0.618286	0.795032
Cellulosilyticum lentocellum	15.14927	0.468173	0.940736	0.497667	0.618719	0.795098
Cutibacterium avidum	4212.877	0.270352	0.544044	0.49693	0.619239	0.795098
Streptomyces sp. M56	29.24684	-0.61312	1.234703	-0.49658	0.619489	0.795098
Microbacterium sp. ABRD_28	145.6834	-0.24004	0.483029	-0.49695	0.619225	0.795098
Propionibacterium virus Pacnes2012	19.32807	0.759428	1.529403	0.496552	0.619505	0.795098
Oceanobacillus iheyensis	23.8166	-0.43991	0.886293	-0.49635	0.619648	0.795098
Lactococcus virus CB13	10.99269	-0.82492	1.664648	-0.49555	0.62021	0.795194
Psychrobacter sp. P11G5	36.44098	-0.46194	0.932619	-0.49531	0.620378	0.795194
Streptomyces koyangensis	54.51813	-0.28238	0.569858	-0.49553	0.620223	0.795194
Brachybacterium sp. VM2412	278.1729	-0.23207	0.470619	-0.49311	0.621937	0.796912
Chryseobacterium sp. G0186	12.99723	0.463747	0.94211	0.492243	0.622547	0.797132
Staphylococcus pettenkoferi	2534.764	0.33917	0.688598	0.492551	0.62233	0.797132
Desulfitobacterium dehalogenans	2.025979	-0.93255	1.89832	-0.49125	0.623248	0.797397
Virgibacillus halodenitrificans	10.23272	0.620347	1.263234	0.491079	0.623371	0.797397
Micromonospora sp. B006	57.58857	-0.26229	0.534263	-0.49095	0.623465	0.797397
Lactobacillus oligofermentans	3.614526	-0.74389	1.515936	-0.49071	0.623631	0.797397
Thermosiphon melanesiensis	1.397518	-1.39479	2.854124	-0.48869	0.625058	0.798413
Dehalococcoides mccartyi	19.61119	-0.5043	1.033314	-0.48804	0.625522	0.798413
Gallibacterium anatis	6.854142	0.608715	1.244862	0.488982	0.624855	0.798413
Spingorhabdus sp. Alg231-15	5.162121	-0.62037	1.270646	-0.48824	0.625383	0.798413

Pedobacter ginsengisoli	26.78294	-0.31937	0.65365	-0.4886	0.625126	0.798413
Sphingopyxis granuli	121.0611	-0.38439	0.792191	-0.48522	0.627518	0.798992
Roseovarius mucosus	6.965377	-0.69078	1.424161	-0.48504	0.627646	0.798992
Thermodesulfobium acidiphilum	1.36465	-1.39513	2.875391	-0.4852	0.627537	0.798992
Alcaligenes aquatilis	30.63265	-0.39493	0.814805	-0.4847	0.627891	0.798992
Aerococcus urinaeequi	55.01444	0.388177	0.801217	0.484484	0.628042	0.798992
Pseudoalteromonas luteoviolacea	10.74196	0.556691	1.14845	0.484732	0.627866	0.798992
Rhizorhabdus dicambivorans	124.9879	-0.28165	0.579258	-0.48623	0.626806	0.798992
Pseudomonas sp. StFLB209	73.54879	-0.28797	0.594615	-0.4843	0.628172	0.798992
Listeria ivanovii	14.4178	-0.43233	0.887896	-0.48692	0.626316	0.798992
Pseudomonas antarctica	91.78227	-0.27643	0.569921	-0.48504	0.627651	0.798992
Prevotella melaninogenica	952.0265	-0.22338	0.462325	-0.48317	0.628976	0.799736
Gloeocapsa sp. PCC 7428	4.632895	-0.69391	1.444985	-0.48022	0.63107	0.800719
Pantoea agglomerans	133.0698	-0.23617	0.491783	-0.48023	0.631062	0.800719
Acinetobacter sp. WCHAc010005	10.49801	-0.56095	1.166713	-0.4808	0.630662	0.800719
Methylobacterium sp. AMS5	55.42099	-0.28085	0.584152	-0.48078	0.630672	0.800719
Escherichia fergusonii	1.499309	1.222486	2.539518	0.481385	0.630243	0.800719
Paenisporosarcina sp. K2R23-3	4.744966	-0.65546	1.360751	-0.48169	0.630027	0.800719
Pseudomonas sp. VLB120	0.610326	-1.40535	2.928457	-0.4799	0.631301	0.800734
Lachnoclostridium sp. YL32	34.9368	-0.47007	0.981188	-0.47908	0.631882	0.801037
Mycoplasma californicum	1.018199	-1.31158	2.738493	-0.47894	0.631981	0.801037
Pseudoalteromonas rubra	1.030726	-1.39601	2.92298	-0.4776	0.632937	0.80197
Rhizobium sp. IRBG74	82.69218	0.507798	1.066863	0.475973	0.634093	0.802597
Thermanaeromonas toyohensis	1.542955	-1.10627	2.323902	-0.47604	0.634046	0.802597
Leclercia sp. LSNIH3	82.80999	-0.57597	1.209562	-0.47618	0.633948	0.802597
Vitreoscilla sp. C1	19.642	-0.4707	0.990968	-0.47499	0.634795	0.803205
Staphylococcus xylosus	162.6876	0.220159	0.464512	0.473958	0.63553	0.803856
Nodularia spumigena	8.444827	-0.65523	1.389582	-0.47153	0.637261	0.805736
Streptococcus thermophilus	1128.455	-0.28207	0.598562	-0.47125	0.637459	0.805736
Halobacteroides halobius	7.633674	0.666472	1.417275	0.470249	0.638177	0.806364
Raphidiopsis curvata	1.092278	-1.2692	2.702378	-0.46966	0.638599	0.806365
Leptospirillum ferriphilum	2.191982	1.250659	2.663094	0.469626	0.638622	0.806365
Chlorobium phaeovibrioides	2.043763	0.966333	2.06473	0.468019	0.639771	0.807536
Desulfotomaculum ferrireducens	1.73967	-1.07482	2.298337	-0.46765	0.640034	0.807588
Calothrix sp. NIES-4101	8.186816	0.564034	1.208995	0.466532	0.640835	0.808038
Propionibacterium virus PHL116M00	12.94259	-0.83387	1.787276	-0.46656	0.640815	0.808038
Streptococcus cristatus	810.5384	-0.30555	0.656551	-0.46538	0.641658	0.808796
Maribacter sp. T28	10.40423	0.588704	1.26682	0.46471	0.642139	0.808828
Enterobacteriaceae bacterium ENNIH	2.430076	-1.0368	2.233982	-0.4641	0.642573	0.808828
Xanthomonas vasicola	87.11195	-0.37852	0.814761	-0.46458	0.642231	0.808828
Clostridium baratii	49.47272	0.276409	0.595247	0.46436	0.64239	0.808828
Aneurinibacillus soli	2.557044	-0.87616	1.889817	-0.46362	0.64292	0.808985
Glaciecola sp. THG-3.7	5.200923	-0.62499	1.353865	-0.46163	0.644346	0.8105
Chryseobacterium nakagawai	18.29613	-0.49151	1.068233	-0.46011	0.645436	0.810982
Chloroherpeton thalassium	2.82806	0.704863	1.531481	0.460249	0.645337	0.810982
Aureitalea sp. RR4-38	2.948781	-0.75437	1.639865	-0.46002	0.645501	0.810982
Microbacterium sp. 1.5R	42.1215	-0.41311	0.899468	-0.45929	0.646029	0.810982
cyanobacterium endosymbiont of Rh	3.873213	0.934246	2.034361	0.459233	0.646066	0.810982
Candidatus Methanomassiliococcus in	1.221944	0.993196	2.162558	0.459269	0.646041	0.810982
Mucilaginibacter sp. PAMC 26640	30.05676	0.340449	0.742507	0.458513	0.646584	0.811351

Microbacterium pygmaeum	140.9416	-0.2418	0.52931	-0.45683	0.647793	0.812588
Paenibacillus yonginensis	4.830058	0.699331	1.532456	0.456347	0.648141	0.812744
Bacillus kochii	7.524256	0.501299	1.100625	0.455468	0.648773	0.813257
Echinicola vietnamensis	8.674486	-0.47337	1.04071	-0.45485	0.649215	0.813502
Bifidobacterium bifidum	128.8663	-0.25374	0.55819	-0.45457	0.649416	0.813502
Brachybacterium sp. P6-10-X1	326.664	-0.21038	0.464286	-0.45312	0.650463	0.814533
Chryseobacterium sp. H6466	281.2365	0.317459	0.704654	0.450517	0.652337	0.814716
Lactobacillus fuchuensis	4.500786	-0.85549	1.894455	-0.45158	0.651574	0.814716
Salegentibacter sp. T436	8.744924	-0.59561	1.320065	-0.4512	0.651845	0.814716
Clostridium sp. SY8519	13.15216	-0.4577	1.015505	-0.45071	0.6522	0.814716
Kocuria flava	639.2663	-0.21284	0.471994	-0.45094	0.652032	0.814716
Polynucleobacter wuianus	1.230564	1.179528	2.608968	0.452105	0.651193	0.814716
Halocynthiibacter arcticus	7.157265	0.460303	1.021917	0.450431	0.6524	0.814716
Streptomyces bacillaris	52.67331	-0.42978	0.949866	-0.45246	0.650936	0.814716
Sphingobacterium sp. ML3W	38.01401	-0.35493	0.789234	-0.44971	0.652919	0.815059
Pseudarthrobacter equi	109.4364	-0.21245	0.473036	-0.44912	0.653347	0.815059
Desulfovibrio piger	21.20824	-0.27235	0.606076	-0.44936	0.653171	0.815059
Pseudomonas mandelii	80.45825	0.323633	0.721097	0.448807	0.653571	0.81506
Oceanisphaera avium	2.326415	-0.85905	1.916191	-0.44831	0.65393	0.815229
Yersinia aleksiciae	1.820069	-1.0298	2.305949	-0.44658	0.655176	0.816502
Buttiauxella sp. 3AFRM03	12.30204	-0.5357	1.200495	-0.44623	0.655428	0.816537
Lactobacillus coryniformis	3.915853	-0.64517	1.447256	-0.44579	0.655748	0.816655
Lactobacillus salivarius	58.75663	-0.21953	0.493291	-0.44502	0.656303	0.817057
Pectobacterium wasabiae	5.017847	-0.65084	1.463468	-0.44472	0.656519	0.817057
Chryseobacterium lactis	21.25698	0.354266	0.799355	0.44319	0.657628	0.817106
Candidatus Desulfofervidus auxilii	2.37507	-1.07893	2.431835	-0.44367	0.657281	0.817106
Streptococcus salivarius	1499.781	0.286642	0.646877	0.443116	0.657682	0.817106
Listeria seeligeri	1.642674	-0.93611	2.112046	-0.44323	0.657603	0.817106
Psychromonas ingrahamii	9.689619	-0.4608	1.037933	-0.44396	0.657073	0.817106
Polaribacter sp. MED152	12.68421	-0.52565	1.187147	-0.44278	0.657923	0.817127
Microbacterium aurum	726.443	-0.25879	0.587737	-0.44032	0.659704	0.817421
Acinetobacter sp. WCHAc010034	31.47518	-0.3116	0.709237	-0.43935	0.66041	0.817421
Betapapillomavirus 4	5.47261	-0.74872	1.70618	-0.43883	0.660784	0.817421
Sphingomonas sp. JJ-A5	54.65138	-0.2564	0.584906	-0.43835	0.661131	0.817421
Moraxella ovis	2.998638	1.244877	2.845476	0.437493	0.661754	0.817421
Curtobacterium sp. BH-2-1-1	174.6275	-0.22769	0.519146	-0.43859	0.66096	0.817421
Candidatus Pantoea carbekii	0.951279	-1.21379	2.771242	-0.438	0.66139	0.817421
Sporosarcina ureae	22.35863	-0.34803	0.7928	-0.43899	0.66067	0.817421
Methanoculleus bourgensis	1.363123	1.24823	2.83618	0.44011	0.659858	0.817421
Bacillus beveridgei	2.995799	-0.6255	1.416053	-0.44172	0.658692	0.817421
Leptolyngbya sp. PCC 7376	3.120726	-0.66254	1.514114	-0.43758	0.661692	0.817421
Bacteroides cellulosilyticus	182.6329	0.346329	0.785229	0.441054	0.659174	0.817421
Caldicellulosiruptor owensensis	2.4083	-0.96835	2.210349	-0.4381	0.661315	0.817421
Propionibacterium virus Stormborn	12.05181	-0.70231	1.597332	-0.43968	0.66017	0.817421
Pseudoalteromonas espejiana	0.563943	-1.28286	2.92924	-0.43795	0.661422	0.817421
Zunongwangia profunda	11.96061	0.513224	1.172982	0.437538	0.661721	0.817421
Flavobacterium columnare	28.54049	0.321038	0.736582	0.435848	0.662947	0.817785
Roseomonas sp. FDAARGOS_362	483.3285	-0.24122	0.552734	-0.43641	0.662537	0.817785
Selenomonas sputigena	82.06401	0.238791	0.547599	0.436069	0.662787	0.817785
Nonlabens sp. Hel1_33_55	3.47184	-0.61738	1.415707	-0.43609	0.662769	0.817785

Lactococcus phage P680	12.69789	-0.78212	1.802804	-0.43384	0.664406	0.818157
Nonlabens dokdonensis	1.25525	-1.26185	2.910234	-0.43359	0.664586	0.818157
Gordonia sp. KTR9	471.1972	-0.2444	0.562913	-0.43416	0.66417	0.818157
Chryseobacterium sp. F5649	259.7272	0.30869	0.711949	0.433585	0.66459	0.818157
Myroides odoratimimus	3.009507	1.22379	2.823069	0.433496	0.664654	0.818157
Pseudomonas granadensis	17.4525	0.42214	0.970956	0.434767	0.663731	0.818157
Leminorella richardii	10.97545	-0.38514	0.889799	-0.43284	0.665128	0.818157
Actinomyces sp. oral taxon 897	228.9073	-0.17959	0.415108	-0.43265	0.665273	0.818157
Brevibacillus formosus	5.693316	-0.58506	1.350899	-0.43309	0.664948	0.818157
Siansivirga zeaxanthinifaciens	4.679154	-0.62519	1.447487	-0.43191	0.665805	0.818535
Pseudomonas fragi	136.7731	-0.29896	0.692841	-0.4315	0.666106	0.818628
Staphylococcus equorum	128.8017	-0.24626	0.573672	-0.42927	0.66773	0.818727
Nitrosococcus watsonii	0.548643	-1.25901	2.9294	-0.42979	0.667352	0.818727
Syntrophomonas wolfei	8.435187	0.561371	1.302513	0.430991	0.666475	0.818727
Streptococcus phage EJ-1	1.233243	-1.13571	2.643274	-0.42966	0.667442	0.818727
Dehalobacterium formicoaceticum	8.609729	-0.52795	1.226958	-0.43029	0.666985	0.818727
Croceibacter atlanticus	2.694788	-0.66388	1.544904	-0.42972	0.667399	0.818727
Mogibacterium pumilum	65.84642	0.306992	0.715228	0.429223	0.667761	0.818727
Enterococcus cecorum	12.64709	-0.40925	0.95766	-0.42735	0.669125	0.820124
Cohnella sp. 18JY8-7	23.03052	-0.26628	0.623807	-0.42686	0.669483	0.820286
Gramella forsetii	3.184364	-0.65791	1.545726	-0.42563	0.670375	0.820798
Thermoproteus uzoniensis	5.380654	0.704875	1.657145	0.425355	0.670578	0.820798
Tepidanaerobacter acetatoxydans	5.728168	-0.51276	1.205284	-0.42543	0.670523	0.820798
Riemerella anatipestifer	19.05456	-0.32778	0.773582	-0.42372	0.671769	0.821979
Corynebacterium pseudotuberculosis	315.2054	0.16001	0.378458	0.422795	0.672445	0.82253
Moorea producens	8.880466	0.41302	0.982559	0.420351	0.674229	0.824435
Marinomonas primoryensis	4.113323	0.580133	1.382586	0.4196	0.674778	0.824829
Mycobacterium intracellulare	146.4717	-0.26447	0.632108	-0.4184	0.675654	0.825623
Tenericutes bacterium MZ-XQ	1.519056	-0.96836	2.322115	-0.41702	0.676667	0.826356
Peptostreptococcaceae bacterium or	909.5465	0.234296	0.561916	0.416959	0.676708	0.826356
Acetomicrobium mobile	1.29682	-0.99608	2.393998	-0.41607	0.677355	0.826734
Bacillus vallismortis	1.576704	-1.0579	2.543552	-0.41592	0.677472	0.826734
Nonlabens sp. MB-3u-79	3.696717	-0.72618	1.748194	-0.41539	0.677858	0.826812
Methanobrevibacter smithii	22.89059	0.484399	1.167518	0.414897	0.678218	0.826812
Prevotella sp. oral taxon 299	114.1891	-0.2358	0.568114	-0.41505	0.678103	0.826812
Brachybacterium ginsengisoli	370.9162	-0.21644	0.523184	-0.41371	0.679089	0.827043
Acholeplasma brassicae	8.557255	0.478881	1.156143	0.414205	0.678724	0.827043
Lelliottia amnigena	64.49493	-0.27431	0.662891	-0.4138	0.679018	0.827043
Pseudoxanthomonas spadix	118.5497	-0.23357	0.566438	-0.41234	0.68009	0.827985
Acholeplasma palmae	9.35182	0.471752	1.148067	0.41091	0.681138	0.828984
Flavobacterium magnum	4.601586	-0.54851	1.337664	-0.41005	0.681767	0.829424
Staphylococcus phage 23MRA	40.36502	1.096545	2.677862	0.409485	0.682184	0.829424
Geobacillus sp. WCH70	6.595148	-0.6206	1.514491	-0.40978	0.68197	0.829424
Psychrobacter sp. P11F6	99.64719	0.335151	0.820297	0.408573	0.682853	0.829961
Paracoccus sp. CBA4604	136.0446	-0.23236	0.56969	-0.40786	0.683373	0.830315
Flavobacterium kingsejongi	8.099727	-0.4393	1.078376	-0.40737	0.683736	0.830468
Scytonema sp. HK-05	19.08221	-0.3994	0.981159	-0.40707	0.683955	0.830468
Staphylococcus phage IME-SA4	27.75244	-0.37282	0.916568	-0.40676	0.684187	0.830472
Staphylococcus phage StB20-like	10.19833	-0.59242	1.457717	-0.4064	0.684448	0.830512
Aliivibrio fischeri	12.56338	0.427797	1.054398	0.405726	0.684944	0.830837

<i>Intestinimonas butyriciproducens</i>	44.06391	0.360738	0.890051	0.4053	0.685257	0.83094
<i>Propionibacterium virus PHL132N00</i>	41.93338	0.593389	1.468566	0.40406	0.686169	0.831208
<i>Desulfovibrio alaskensis</i>	13.55782	-0.482	1.195618	-0.40314	0.686849	0.831208
<i>Cyclobacterium marinum</i>	13.84702	-0.38333	0.947418	-0.4046	0.685771	0.831208
<i>Paenibacillus sp. FSL R7-0273</i>	8.165011	-0.50189	1.243716	-0.40354	0.686549	0.831208
<i>Betapapillomavirus 6</i>	4.056561	-0.82235	2.035765	-0.40395	0.686248	0.831208
<i>Kocuria rhizophila</i>	1715.879	-0.23878	0.592198	-0.40321	0.686795	0.831208
<i>Acetobacter pasteurianus</i>	6.43353	-0.6115	1.519549	-0.40242	0.687372	0.831288
<i>Celeribacter baekdonensis</i>	16.20811	-0.27487	0.683011	-0.40243	0.687366	0.831288
<i>Marivivens sp. JLT3646</i>	4.836552	-0.5821	1.448702	-0.40181	0.687825	0.831559
<i>Virgibacillus sp. 6R</i>	11.54845	0.418229	1.042949	0.401006	0.688416	0.831997
secondary endosymbiont of <i>Trabutina</i>	1.903734	1.097211	2.739836	0.400466	0.688813	0.832202
<i>Candidatus Saccharibacteria bacterium</i>	1.035419	-1.08447	2.711458	-0.39996	0.689189	0.832379
<i>Anoxybacillus amylolyticus</i>	5.251694	-0.53093	1.329496	-0.39934	0.689639	0.832647
<i>Hafnia alvei</i>	16.0993	-0.5403	1.358867	-0.39761	0.69092	0.83286
<i>Komagataeibacter hansenii</i>	22.90241	-0.2959	0.744389	-0.3975	0.690995	0.83286
<i>Mordavella sp. Marseille-P3756</i>	36.05953	-0.47118	1.182142	-0.39858	0.6902	0.83286
<i>Staphylococcus carnosus</i>	44.67409	-0.25052	0.630646	-0.39724	0.691189	0.83286
<i>Bifidobacterium coryneforme</i>	3.223467	-0.86972	2.188397	-0.39742	0.691054	0.83286
<i>Helicobacter apodemus</i>	2.841175	-0.70582	1.775899	-0.39744	0.691041	0.83286
<i>Myroides odoratus</i>	13.19923	0.419046	1.063659	0.393967	0.693605	0.835495
<i>Paenibacillus kribbensis</i>	7.911016	0.436931	1.11131	0.393167	0.694196	0.835929
<i>Marinomonas posidonica</i>	5.386261	0.508589	1.294622	0.392847	0.694432	0.835937
<i>Blautia sp. N6H1-15</i>	57.64221	0.341999	0.871719	0.392328	0.694816	0.836123
<i>Legionella sainthelensi</i>	3.841177	0.797097	2.034992	0.391696	0.695283	0.836408
<i>Shewanella sediminis</i>	5.65624	-0.60307	1.547699	-0.38965	0.696793	0.837671
<i>Psychrobacter sp. YP14</i>	10.55975	0.616918	1.583215	0.389662	0.696787	0.837671
<i>Psychrobacter urativorans</i>	14.32934	-0.37824	0.97265	-0.38888	0.697366	0.838083
<i>Colwellia beringensis</i>	2.081857	-0.8099	2.089075	-0.38768	0.698251	0.838869
<i>Renibacterium salmoninarum</i>	55.7969	-0.17071	0.441033	-0.38707	0.698704	0.838939
<i>Vibrio owensii</i>	1.856336	-1.06039	2.740165	-0.38698	0.69877	0.838939
<i>Paenibacillus sp. FSL H7-0737</i>	0.696667	1.129234	2.928495	0.385602	0.699791	0.839888
<i>Maribacter sp. HTCC2170</i>	6.270861	-0.47237	1.227093	-0.38495	0.700275	0.840192
<i>Chryseobacterium sp. G0201</i>	26.04594	-0.35717	0.928667	-0.38461	0.70053	0.84022
<i>Staphylococcus virus CNPH82</i>	43.7221	0.449546	1.173058	0.383226	0.701553	0.840959
<i>Anabaena cylindrica</i>	8.690467	0.569916	1.487448	0.38315	0.701608	0.840959
<i>Brachybacterium faecium</i>	418.2911	-0.19202	0.504539	-0.38059	0.70351	0.842961
<i>Flavobacterium psychrophilum</i>	17.53659	0.286758	0.754095	0.380269	0.703746	0.842966
<i>Thermoanaerobacterium sp. RBITD</i>	7.936611	0.41154	1.087948	0.378272	0.705229	0.843385
<i>Propionibacterium virus P91</i>	26.32065	-0.56151	1.480364	-0.3793	0.704462	0.843385
<i>Ochrobactrum pseudogrignonense</i>	30.06788	-0.34863	0.921709	-0.37824	0.705254	0.843385
<i>Lactococcus virus SI4</i>	14.82768	-0.54473	1.439448	-0.37843	0.705112	0.843385
<i>Candidatus Thioglobus singularis</i>	19.65821	0.358621	0.947752	0.378391	0.70514	0.843385
<i>Geobacillus genomosp. 3</i>	7.097684	-0.54532	1.4455	-0.37725	0.705984	0.843981
<i>Brevefilum fermentans</i>	1.577376	0.871181	2.311732	0.376852	0.706284	0.844061
<i>Photobacterium damsela</i>	25.77637	-0.36781	0.978596	-0.37586	0.707024	0.844391
<i>Halomicronema hongdechloris</i>	11.27765	-0.41489	1.102978	-0.37615	0.706804	0.844391
<i>Bordetella parapertussis</i>	4.026741	-0.9389	2.500521	-0.37548	0.707303	0.844447
<i>Staphylococcus phage CNP_x</i>	58.47082	0.929435	2.490052	0.373259	0.708956	0.845865
<i>Bacillus cytotoxicus</i>	12.72163	-0.41417	1.10875	-0.37354	0.708744	0.845865

Cyanothece sp. PCC 7425	5.621826	-0.51141	1.375948	-0.37168	0.710132	0.846948
Propionibacterium virus PAS50	16.46506	-0.57458	1.546998	-0.37142	0.710328	0.846948
Brevibacterium sandarakinum	279.4017	-0.19967	0.538788	-0.3706	0.710936	0.847394
Micromonospora coxensis	87.06114	-0.17733	0.48015	-0.36931	0.711894	0.848259
Octadecabacter temperatus	1.949813	-0.70915	1.923958	-0.36859	0.712434	0.848625
Planococcus maritimus	1.89675	0.768044	2.093776	0.366822	0.713751	0.849637
[Eubacterium] eligens	68.83569	-0.29692	0.809252	-0.36691	0.71369	0.849637
Corynebacterium genitalium	3549.912	-0.17562	0.479763	-0.36606	0.714324	0.849763
Desulfotomaculum ruminis	2.665672	-0.60274	1.646571	-0.36606	0.714321	0.849763
Paenibacillus sp. IHBB 10380	2.351535	-0.64124	1.755987	-0.36517	0.714981	0.849989
Campylobacter fetus	13.97018	0.431326	1.180366	0.365417	0.7148	0.849989
Taylorella equigenitalis	2.362239	0.817251	2.253292	0.362692	0.716835	0.850522
Lelliottia jeotgali	11.05411	-0.32797	0.903488	-0.36301	0.716598	0.850522
Marivirga tractuosa	9.984065	0.354734	0.974052	0.364184	0.715721	0.850522
Bdellovibrio exovorus	1.414271	-0.93621	2.583921	-0.36232	0.717112	0.850522
Trichormus azollae	5.594551	0.604975	1.66254	0.363886	0.715943	0.850522
Synechococcus sp. PCC 7502	0.962565	-0.81974	2.258941	-0.36289	0.71669	0.850522
Natranaerobius thermophilus	6.159975	0.530056	1.463957	0.362071	0.717299	0.850522
Pantoea sp. At-9b	46.21595	-0.28433	0.782853	-0.3632	0.716458	0.850522
Mycoplasma hyosynoviae	0.261406	1.062631	2.941146	0.361298	0.717877	0.850929
Methanobacterium paludis	0.679451	1.055209	2.928604	0.360311	0.718614	0.850954
Adlercreutzia equolifaciens	118.6598	-0.24303	0.674299	-0.36042	0.718533	0.850954
Desulfosporosinus youngiae	6.872082	-0.36063	1.001706	-0.36002	0.718833	0.850954
Clostridium cochlearium	13.73673	0.379501	1.052287	0.360643	0.718366	0.850954
Pseudoalteromonas piratica	1.208552	-0.85851	2.397968	-0.35802	0.720331	0.851067
Aequorivita sublithincola	4.078785	0.630519	1.758121	0.358632	0.71987	0.851067
[Eubacterium] cellulosolvens	10.31791	-0.4025	1.124151	-0.35805	0.720304	0.851067
Human papillomavirus	2.152701	-0.97052	2.703859	-0.35894	0.71964	0.851067
Microbacterium sp. str. 'China'	94.83352	-0.32149	0.89499	-0.35921	0.719436	0.851067
Acinetobacter radioresistens	134.8986	0.246209	0.687598	0.358071	0.72029	0.851067
Proteus vulgaris	19.31757	0.341399	0.95751	0.356549	0.721429	0.851811
Campylobacter coli	10.42471	0.40527	1.135973	0.356761	0.721271	0.851811
Moraxellaceae bacterium HYN0046	6.012056	-0.43185	1.214741	-0.35551	0.722206	0.852452
Nostoc sp. NIES-4103	25.60962	0.314003	0.885203	0.354724	0.722796	0.852595
Mycobacterium sp. KMS	5.59132	-0.94223	2.654243	-0.35499	0.722598	0.852595
Novibacillus thermophilus	5.622224	-0.45656	1.28824	-0.3544	0.723037	0.852603
Bacillus horikoshii	7.1103	0.412758	1.16674	0.35377	0.723511	0.852885
Lactobacillus amylophilus	1.846838	-0.74554	2.114335	-0.35261	0.724379	0.853427
Sulfurospirillum sp. JPD-1	2.087111	-0.7961	2.258245	-0.35253	0.724439	0.853427
Pseudomonas frederiksbergensis	58.88852	-0.19088	0.542403	-0.35192	0.724896	0.853688
Draconibacterium orientale	10.48772	0.353583	1.006382	0.351341	0.725333	0.853926
Vibrio tubiashii	20.29988	-0.41588	1.187923	-0.35009	0.72627	0.854753
Jannaschia sp. CCS1	14.93372	-0.25257	0.726885	-0.34747	0.728238	0.855961
Bacillus mycoides	65.07643	-0.32887	0.944986	-0.34802	0.727829	0.855961
Arcticibacterium luteifluviistationis	6.508474	-0.44874	1.291119	-0.34756	0.728169	0.855961
Vibrio crassostreae	3.533951	0.76064	2.184204	0.348246	0.727655	0.855961
Staphylococcus epidermidis	69890.84	0.17901	0.515675	0.347137	0.728488	0.85598
Flavobacteriaceae bacterium MAR_21	3.116995	0.605518	1.756172	0.344794	0.730249	0.856695
Enterobacter bugandensis	1.900811	-0.94257	2.733974	-0.34476	0.730274	0.856695
Meiothermus silvanus	35.30126	-0.24629	0.71271	-0.34556	0.72967	0.856695

Calothrix sp. PCC 7507	9.037777	-0.51711	1.499863	-0.34477	0.730264	0.856695
Flavobacterium branchiophilum	14.29872	0.306033	0.885899	0.34545	0.729756	0.856695
Thermoclostridium stercorarium	4.258979	-0.522	1.521094	-0.34317	0.73147	0.857821
Propionibacterium virus PHL111M01	20.33024	-0.55095	1.614088	-0.34134	0.732848	0.859161
Candidatus Fukatsua symbiotica	9.103721	-0.33791	0.994018	-0.33994	0.733901	0.860118
Shewanella piezotolerans	2.216228	-0.55009	1.64458	-0.33448	0.738014	0.860716
Paenibacillus durus	32.12048	-0.19061	0.563632	-0.33818	0.735229	0.860716
Vibrio splendidus	3.309505	-0.51231	1.542881	-0.33205	0.739852	0.860716
Lactococcus phage 340	4.786294	0.723702	2.169794	0.333535	0.738731	0.860716
Calothrix sp. 336/3	1.082577	-0.74759	2.220463	-0.33668	0.736357	0.860716
Erythrobacter seohaensis	20.79795	0.194767	0.581765	0.334787	0.737786	0.860716
Thermosynechococcus elongatus	1.87292	-0.91213	2.740859	-0.33279	0.739292	0.860716
Leptospira alstonii	0.544596	0.981934	2.930977	0.33502	0.73761	0.860716
Anaerococcus mediterraneensis	915.4101	0.147096	0.440204	0.334156	0.738262	0.860716
Auricoccus indicus	42.27783	0.269348	0.801966	0.335859	0.736977	0.860716
Molluscum contagiosum virus	1966.073	-0.96311	2.885448	-0.33378	0.738545	0.860716
Planococcus donghaensis	2.645774	-0.68182	2.052993	-0.33211	0.739808	0.860716
Fusobacterium mortiferum	12.80545	0.275826	0.824561	0.334512	0.737993	0.860716
Actinobacillus succinogenes	4.517492	0.528501	1.56241	0.33826	0.735167	0.860716
Actinomyces radingae	372.5088	-0.19849	0.587276	-0.33798	0.735378	0.860716
Paenibacillus donghaensis	30.99149	-0.22392	0.673819	-0.33232	0.739649	0.860716
Listeria welshimeri	2.149747	0.689496	2.068585	0.333318	0.738894	0.860716
Ralstonia phage 1 NP-2014	2.333994	0.89911	2.665987	0.337252	0.735927	0.860716
Salinigranum rubrum	18.65223	-0.20397	0.601761	-0.33895	0.734649	0.860716
Propionibacterium virus Kubed	9.01114	0.705632	2.11786	0.333181	0.738997	0.860716
Bacteroides helcogenes	65.17688	-0.34267	1.030013	-0.33268	0.739373	0.860716
Arenibacter algicola	9.95459	-0.38187	1.147981	-0.33264	0.739405	0.860716
Streptococcus anginosus	734.89	-0.19389	0.5771	-0.33597	0.736892	0.860716
Formosa sp. Hel3_A1_48	0.818433	-0.96906	2.924797	-0.33133	0.740398	0.861077
Propionibacterium phage PA1-14	16.34438	-0.4354	1.315504	-0.33097	0.740664	0.86111
Selenomonas sp. oral taxon 920	78.55688	-0.17282	0.523655	-0.33002	0.741386	0.8614
Basilea psittacipulmonis	5.642592	-0.48451	1.46705	-0.33026	0.741204	0.8614
Lactobacillus reuteri	29.00835	-0.25611	0.778102	-0.32915	0.742044	0.861889
Peptoniphilus sp. ING2-D1G	109.602	0.187432	0.573315	0.326927	0.743723	0.863564
Caldicellulosiruptor obsidiansis	0.877859	-0.94488	2.923754	-0.32317	0.746565	0.866311
Kosmotoga olearia	0.681997	-0.94671	2.926963	-0.32344	0.746359	0.866311
Lactobacillus agilis	1.894006	-0.62498	1.937726	-0.32253	0.747048	0.866595
Streptococcus pyogenes	327.4148	0.149799	0.464952	0.322181	0.747316	0.866629
Lactobacillus ginsenosidimutans	4.692517	-0.44298	1.376405	-0.32184	0.747573	0.866651
Pseudoclostridium thermosuccinoger	6.836623	0.443526	1.380274	0.321331	0.747959	0.866823
Serinococcus sp. JLT9	187.7579	-0.13778	0.429234	-0.321	0.748213	0.86684
Eubacterium callanderi	7.09796	-0.49071	1.532232	-0.32026	0.74877	0.86721
Deinococcus peraridilitoris	32.36419	-0.25665	0.805058	-0.3188	0.74988	0.86822
Candidatus Kinetoplastibacterium gal	1.117566	-0.77315	2.438054	-0.31712	0.751154	0.868313
Serratia liquefaciens	54.42773	0.222097	0.698948	0.317759	0.750668	0.868313
Alkalitalea saponilacus	6.361379	-0.36636	1.154809	-0.31725	0.751055	0.868313
Pseudoalteromonas phenolica	2.558871	-0.60714	1.907881	-0.31823	0.750311	0.868313
Rahnella aquatilis	135.1833	-0.19656	0.619193	-0.31744	0.750908	0.868313
Flavobacterium gilvum	28.11967	-0.26707	0.844102	-0.31639	0.751704	0.868673
Propionibacterium virus P105	15.99363	0.527325	1.685633	0.312835	0.754406	0.871519

Stenotrophomonas sp. LM091	335.7344	-0.16789	0.539082	-0.31144	0.755466	0.872466
Propionibacterium virus PAD20	17.02172	0.434801	1.403863	0.309717	0.756776	0.873329
Lactococcus virus ASCC191	9.414859	-0.43682	1.408783	-0.31007	0.756507	0.873329
Providencia sneebia	5.776468	-0.44988	1.453517	-0.30951	0.756933	0.873329
Moraxella bovis	8.370462	-0.30869	1.001002	-0.30838	0.757794	0.874045
Geosporobacter ferrireducens	10.49999	0.276242	0.897264	0.307871	0.75818	0.874083
Pedobacter sp. G11	29.27169	-0.22755	0.740275	-0.30739	0.758548	0.874083
Kocuria palustris	1301.474	-0.13935	0.453297	-0.30742	0.758523	0.874083
Lactobacillus heilongjiangensis	0.838692	-0.86641	2.829047	-0.30625	0.759411	0.874801
Staphylococcus phage StB27	26.49997	0.248034	0.811642	0.305596	0.759913	0.875102
Candidatus Planktophila lacus	8.071897	-0.32808	1.074737	-0.30527	0.760164	0.875115
Listeria monocytogenes	72.88856	0.145185	0.47663	0.304608	0.760665	0.875414
Chryseobacterium sp. StRB126	16.58049	-0.27783	0.922075	-0.30131	0.763177	0.877239
Spiroplasma turonicum	3.20052	0.573325	1.903079	0.301262	0.763215	0.877239
Candidatus Kuenenia stuttgartiensis	1.118945	-0.66525	2.206863	-0.30144	0.763076	0.877239
Psychromonas sp. CNPT3	7.646428	-0.3776	1.250431	-0.30198	0.762668	0.877239
Desulfosporosinus acidiphilus	1.393969	-0.70574	2.346262	-0.30079	0.763573	0.877373
Winogradskyella sp. PG-2	7.58602	0.355195	1.18513	0.29971	0.764398	0.877491
Hydrogenovibrio crunogenus	0.745351	-0.86815	2.89473	-0.29991	0.764247	0.877491
Tenacibaculum sp. SZ-18	13.44991	0.26044	0.86845	0.29989	0.764261	0.877491
Candidatus Nitrosoglobus terrae	3.998032	0.457153	1.532126	0.298378	0.765415	0.87838
Cloacibacterium normanense	65.01024	0.125859	0.422752	0.297715	0.765921	0.878684
Streptococcus sp. A12	145.4741	-0.16001	0.542071	-0.29519	0.767849	0.878859
Halohasta litchfieldiae	4.469515	-0.4284	1.457989	-0.29383	0.768889	0.878859
Lactobacillus paracasei	44.98414	-0.29269	0.987061	-0.29653	0.766826	0.878859
Capnocytophaga canimorsus	17.05439	0.243912	0.828945	0.294244	0.768571	0.878859
Bacillus filamentosus	15.73857	-0.22227	0.747876	-0.2972	0.766317	0.878859
Lutibacter sp. LPB0138	14.11367	-0.36441	1.23953	-0.29399	0.768765	0.878859
Gammapapillomavirus 13	1.425743	-0.85726	2.916959	-0.29389	0.768844	0.878859
Candidatus Rhodoluna planktonica	12.07164	-0.22674	0.76472	-0.29651	0.766844	0.878859
Thermosulfidibacter takaii	3.070635	0.520327	1.759026	0.295804	0.76738	0.878859
Staphylococcus phage SAP-2	0.41249	-0.86233	2.932409	-0.29407	0.768704	0.878859
Polaribacter sp. ALD11	5.986388	0.464029	1.572921	0.295011	0.767985	0.878859
Pseudomonas sp. s211(2017)	4.243925	-0.63469	2.160876	-0.29372	0.768972	0.878859
Propionibacterium phage BruceLetha	1.906552	-0.66405	2.266396	-0.293	0.769523	0.879213
Aeribacillus pallidus	8.388508	0.409204	1.401402	0.291996	0.770289	0.879813
Bacillus megaterium	77.62391	-0.17951	0.61749	-0.29072	0.771268	0.880654
Phoenicibacter massiliensis	8.340904	-0.31847	1.098073	-0.29003	0.771795	0.88098
Tannerella sp. oral taxon HOT-286	270.525	-0.16513	0.572317	-0.28853	0.772941	0.882011
Microcoleus sp. PCC 7113	8.590375	-0.31662	1.10015	-0.28779	0.773504	0.882376
Kribbella flavida	143.0238	-0.13116	0.456637	-0.28723	0.773936	0.882592
Streptococcus lutetiensis	14.04945	-0.39914	1.398557	-0.28539	0.775343	0.882814
Leptospira mayottensis	0.769251	-0.81929	2.868577	-0.28561	0.775178	0.882814
Gammapapillomavirus 18	1.381915	-0.82361	2.87675	-0.2863	0.774649	0.882814
Dictyoglomus turgidum	1.876795	0.651135	2.276123	0.286072	0.774823	0.882814
Mycobacterium sp. JLS	87.53737	-0.20594	0.720803	-0.28571	0.7751	0.882814
Flagellimonas sp. HME9304	1.048649	-0.77031	2.702938	-0.28499	0.775653	0.882891
Labrenzia sp. CP4	4.130863	-0.56504	1.990103	-0.28392	0.776469	0.883182
Lactobacillus kullabergensis	2.770708	0.461775	1.631304	0.283071	0.777122	0.883182
Treponema putidum	4.244842	0.497826	1.756277	0.283456	0.776828	0.883182

Psychrobacter sp. G	53.78459	-0.31917	1.126669	-0.28329	0.776956	0.883182
Acinetobacter oleivorans	9.543587	0.322112	1.132861	0.284335	0.776154	0.883182
Pseudoalteromonas sp. NC201	1.091319	-0.82515	2.920254	-0.28256	0.777514	0.883351
Chromobacterium violaceum	112.5095	-0.17899	0.636276	-0.28131	0.778472	0.883416
Propionibacterium virus Pirate	9.806955	-0.46665	1.66243	-0.2807	0.778937	0.883416
Pseudomonas moraviensis	110.5513	-0.17838	0.635073	-0.28087	0.778807	0.883416
Solitalea canadensis	16.89501	-0.23941	0.853241	-0.28059	0.779028	0.883416
Psychroflexus torquis	4.738412	0.438523	1.562528	0.28065	0.778979	0.883416
Capnocytophaga sputigena	144.6081	-0.1489	0.527801	-0.2821	0.777863	0.883416
Propionibacterium virus PHL179M00	10.88885	-0.48859	1.747721	-0.27956	0.779818	0.884037
Aliivibrio wodanis	7.348856	-0.37159	1.334584	-0.27843	0.780679	0.884738
Agarilytica rhodophyticola	4.472106	0.487758	1.767013	0.276036	0.782521	0.886548
Rickettsiales bacterium Ac37b	1.685005	0.766311	2.786484	0.27501	0.783308	0.887164
Streptomyces sp. ICC1	631.9655	-0.2646	0.966426	-0.27379	0.784242	0.887903
Marinomonas mediterranea	3.187238	-0.39978	1.462362	-0.27338	0.784559	0.887903
Helicobacter cinaedi	0.883541	0.758082	2.781195	0.272574	0.785181	0.887903
Streptomyces sp. ADI95-16	44.91856	-0.21492	0.787287	-0.27299	0.784858	0.887903
Lactococcus phage phi7	8.300431	-0.49243	1.805173	-0.27279	0.785014	0.887903
Brachybacterium saurashtrense	508.4129	-0.13379	0.495596	-0.26995	0.787199	0.888722
Anaerococcus prevotii	1712.296	-0.12242	0.45181	-0.27096	0.786419	0.888722
Gordonia virus Wizard	1.123393	0.789081	2.919404	0.270288	0.786938	0.888722
Candidatus Planktophila sulfonica	7.314835	-0.31715	1.175837	-0.26973	0.78737	0.888722
Bifidobacterium breve	133.6137	0.119503	0.441221	0.270846	0.786509	0.888722
Blautia hansenii	78.65005	-0.23997	0.886846	-0.27059	0.786705	0.888722
Tenacibaculum dicentrarchi	5.910734	0.371401	1.38517	0.268127	0.788602	0.889484
Plantactinospira sp. BB1	43.01504	-0.23421	0.873642	-0.26808	0.788636	0.889484
Turicibacter sp. H121	12.21761	-0.32481	1.212443	-0.2679	0.788778	0.889484
Scytonema sp. NIES-4073	2.721479	0.699458	2.615821	0.267395	0.789165	0.889644
Caldanaerobacter subterraneus	1.626333	-0.56957	2.135605	-0.2667	0.7897	0.889971
Macrococcus sp. IME1552	60.12743	-0.23612	0.887051	-0.26618	0.790098	0.890144
Sulfurovum sp. NBC37-1	1.781609	-0.56172	2.122502	-0.26465	0.791281	0.891201
Acinetobacter wuhouensis	60.58601	0.194958	0.740606	0.263241	0.792365	0.892146
Acinetobacter sp. WCHAc010052	13.74822	-0.30244	1.152793	-0.26235	0.793049	0.89264
Virgibacillus sp. SK37	4.628546	0.457501	1.74621	0.261997	0.793324	0.892674
Candidatus Kinetoplastibacterium bla	2.8619	0.582842	2.241706	0.26	0.794864	0.89413
Serratia fonticola	43.35822	-0.15156	0.584006	-0.25952	0.795232	0.894268
Candidatus Protochlamydia naegleric	2.155135	-0.49152	1.910141	-0.25732	0.796931	0.895132
Lactococcus piscium	89.26275	0.198906	0.772776	0.257391	0.796877	0.895132
Propionibacterium phage PHL082M0i	36.33028	0.369008	1.431128	0.257844	0.796527	0.895132
Sulfurospirillum sp. UCH001	2.77228	0.46052	1.790155	0.257251	0.796985	0.895132
Prevotella denticola	529.3192	-0.14722	0.573905	-0.25653	0.797544	0.895207
Shewanella denitrificans	1.613512	-0.54864	2.138144	-0.2566	0.797489	0.895207
Yersinia enterocolitica	53.92959	0.134316	0.528978	0.253916	0.799561	0.897194
Spiroplasma culicicola	2.931068	0.560888	2.227725	0.251776	0.801214	0.898772
Legionella fallonii	4.22809	0.443281	1.777403	0.249398	0.803053	0.900558
Weissella paramesenteroides	3.115317	0.357858	1.449631	0.246862	0.805015	0.901511
Acinetobacter baumannii	757.6335	0.124635	0.505214	0.246698	0.805142	0.901511
Pseudomonas sp. R3-18-08	1.855267	-0.6775	2.739814	-0.24728	0.804691	0.901511
Bacillus velezensis	40.22477	-0.27251	1.102702	-0.24713	0.804806	0.901511
Pseudomonas rhodesiae	87.31497	-0.15035	0.606449	-0.24792	0.804195	0.901511

Rhodococcus sp. S2-17	164.8666	-0.11148	0.453947	-0.24557	0.806014	0.901974
Spiroplasma clarkii	1.946057	0.515877	2.101127	0.245524	0.806051	0.901974
Propionibacterium virus Ouroboros	4.988039	0.345922	1.410766	0.245201	0.806301	0.901976
Nitratifractor salsuginis	10.08068	-0.28036	1.149748	-0.24384	0.807351	0.902874
Pseudomonas sp. SW144	18.70547	-0.37332	1.537427	-0.24282	0.808145	0.903305
Vibrio diabolicus	1.163526	-0.70849	2.919138	-0.24271	0.808233	0.903305
Capnocytophaga stomatis	10.0724	-0.28903	1.196679	-0.24153	0.809146	0.904048
Acinetobacter lactucae	11.44746	-0.26127	1.092842	-0.23907	0.811049	0.905733
Blochmannia endosymbiont of Camp	0.758318	-0.69842	2.925121	-0.23877	0.811286	0.905733
Cyclobacterium amurskyense	11.28486	0.250996	1.051993	0.238591	0.811423	0.905733
Selenomonas sp. oral taxon 126	67.76124	-0.12104	0.50795	-0.2383	0.81165	0.905733
Propionibacterium sp. oral taxon 193	1739.888	-0.1592	0.671232	-0.23717	0.812522	0.906428
Propionibacterium virus Wizzo	7.617146	0.337413	1.42772	0.23633	0.813177	0.906432
Propionibacterium virus Solid	22.7918	-0.33499	1.418223	-0.23621	0.813273	0.906432
Pseudomonas sp. Z003-0.4C(8344-21	27.51487	0.176384	0.746558	0.236264	0.813228	0.906432
[Clostridium] ultunense	19.46693	0.20072	0.857824	0.233987	0.814995	0.908073
Thermocrinis ruber	0.707474	-0.68182	2.926028	-0.23302	0.815746	0.908631
Mucilagibacter paludis	28.31728	-0.14318	0.625155	-0.22902	0.81885	0.91181
Calothrix sp. NIES-2098	5.834119	0.43489	1.902137	0.228632	0.819155	0.91187
Shewanella halifaxensis	6.823289	-0.32446	1.428428	-0.22714	0.820312	0.91288
Fischerella sp. NIES-4106	6.671652	0.26744	1.183725	0.225931	0.821255	0.91365
Ruminiclostridium cellulolyticum	6.799959	0.276305	1.23177	0.224316	0.822512	0.914768
Desulfotomaculum reducens	2.861364	-0.36321	1.6234	-0.22374	0.822962	0.914989
Halobacteriovorax marinus	6.486107	-0.31228	1.400596	-0.22297	0.823563	0.915377
Mesoplasma syrphidae	0.670536	-0.64682	2.926657	-0.22101	0.825085	0.916789
Candidatus Blochmannia floridanus	1.057556	0.643667	2.920306	0.220411	0.825551	0.917027
Acinetobacter lwoffii	588.4382	-0.13394	0.616648	-0.21721	0.828048	0.91952
Desulfosporosinus orientis	2.672512	-0.34937	1.624955	-0.21501	0.829763	0.921144
Sulfitobacter sp. SK025	23.20002	-0.16556	0.773429	-0.21406	0.830499	0.921398
Propionibacterium virus PHL041M10	13.91921	0.402598	1.879385	0.214218	0.830377	0.921398
Formosa sp. Hel1_33_131	5.394505	-0.35295	1.662421	-0.21231	0.831866	0.921791
Lactobacillus allii	2.826125	-0.3277	1.541375	-0.21261	0.831635	0.921791
Chryseobacterium carnis	21.3288	0.178637	0.840805	0.21246	0.831748	0.921791
Methanosarcina thermophila	2.272949	0.521084	2.448959	0.212778	0.8315	0.921791
Glaciecola sp. 4H-3-7+YE-5	4.068463	-0.33198	1.56742	-0.2118	0.832264	0.921951
Leuconostoc virus LN03	1.162436	-0.61256	2.919031	-0.20985	0.833785	0.922951
Ruegeria sp. NKC1-1	1.321255	-0.49732	2.37193	-0.20967	0.833927	0.922951
Halomonas sp. GT	2.449105	-0.46994	2.23665	-0.21011	0.833581	0.922951
Monoglobus pectinilyticus	20.73177	-0.27331	1.30866	-0.20885	0.834566	0.923377
Hungateiclostridium thermocellum	4.702029	0.340368	1.636197	0.208024	0.83521	0.923808
Lactobacillus sanfranciscensis	1.144477	0.408555	1.996465	0.204639	0.837854	0.925494
Desulfobacterium autotrophicum	6.975836	-0.23425	1.143377	-0.20488	0.837668	0.925494
Crinalium epipsammum	10.00468	-0.21234	1.038594	-0.20445	0.838006	0.925494
Gramella sp. MAR_2010_102	0.828174	-0.59811	2.923503	-0.20459	0.837894	0.925494
Cellulophaga algicola	10.10247	0.211418	1.030982	0.205065	0.837521	0.925494
Pseudomonas sp. FGI182	6.536868	-0.35749	1.759303	-0.2032	0.838979	0.926288
Corynebacterium phocae	1443.187	0.046907	0.232714	0.201566	0.840256	0.927417
Capnocytophaga leadbetteri	205.6362	-0.1317	0.658668	-0.19994	0.841524	0.928534
Staphylococcus agnetis	33.36461	0.097556	0.491901	0.198325	0.842791	0.929087
Catenovulum sp. CCB-QB4	1.122209	0.436121	2.193986	0.19878	0.842435	0.929087

<i>Mycobacterium chimaera</i>	148.5829	0.119183	0.600479	0.19848	0.842669	0.929087
Propionibacterium virus PHL301M00	11.94329	0.524724	2.65194	0.197864	0.843151	0.929203
Propionibacterium phage PHL030NOC	11.20651	-0.39362	1.996391	-0.19716	0.843699	0.929525
<i>Cutibacterium acnes</i>	290851.9	0.104268	0.529878	0.196778	0.844001	0.929576
<i>Sphingopyxis</i> sp. LPB0140	3.974258	0.266333	1.358799	0.196006	0.844606	0.929961
<i>Acinetobacter calcoaceticus</i>	39.78422	-0.16423	0.842177	-0.195	0.845391	0.929982
<i>Arthrospira platensis</i>	3.690565	-0.31811	1.629299	-0.19525	0.8452	0.929982
<i>Francisella</i> sp. FDC440	2.000327	0.411325	2.102602	0.195627	0.844902	0.929982
<i>Helicobacter canadensis</i>	2.405956	0.435713	2.246723	0.193933	0.846229	0.930236
<i>Leptolyngbya boryana</i>	10.56693	-0.18846	0.972072	-0.19388	0.846274	0.930236
<i>Erwinia persicina</i>	34.03336	-0.13116	0.677058	-0.19373	0.84639	0.930236
<i>Marinomonas</i> sp. MWYL1	4.56005	-0.26768	1.392359	-0.19225	0.847548	0.93115
Propionibacterium virus P1.1	15.09883	-0.26361	1.372904	-0.19201	0.847733	0.93115
<i>Thermoanaerobacterium xylanolyticu</i>	4.118542	-0.27138	1.422965	-0.19072	0.848748	0.93159
<i>Cronobacter turicensis</i>	4.107069	0.357614	1.880264	0.190193	0.849158	0.93159
<i>Marinobacter</i> sp. BSs20148	1.156633	0.555863	2.918576	0.190457	0.848951	0.93159
<i>Gottschalkia acidurici</i>	19.8378	0.138693	0.728282	0.190438	0.848966	0.93159
<i>Helicobacter</i> sp. MIT 01-6242	0.594486	-0.5532	2.928217	-0.18892	0.850154	0.932403
<i>Negativicoccus massiliensis</i>	268.8702	-0.1104	0.588937	-0.18745	0.851305	0.933158
<i>Butyrivibrio fibrisolvens</i>	26.1544	0.188227	1.004476	0.187388	0.851356	0.933158
Streptococcus phage SM1	3.577398	-0.38002	2.034878	-0.18675	0.851854	0.933423
<i>Belliella baltica</i>	11.13254	-0.20104	1.085425	-0.18522	0.853056	0.934097
<i>Stenotrophomonas</i> sp. G4	43.56978	0.15114	0.817032	0.184986	0.85324	0.934097
<i>Bacillus pseudomycoides</i>	33.90907	0.093357	0.504486	0.185054	0.853187	0.934097
<i>Corynebacterium mustelae</i>	342.2789	0.072731	0.394951	0.184153	0.853894	0.934532
<i>Clostridium aceticum</i>	7.361256	-0.20829	1.134808	-0.18355	0.854368	0.93477
<i>Photorhabdus asymbiotica</i>	6.398264	-0.22143	1.216934	-0.18196	0.855617	0.935855
<i>Sedimentisphaera salicampi</i>	1.068434	-0.52496	2.920105	-0.17977	0.857331	0.937166
<i>Microbacterium</i> sp. PM5	112.1781	-0.07806	0.433918	-0.17989	0.857241	0.937166
Sphingobacteriaceae bacterium GW4	24.6664	-0.12122	0.676196	-0.17926	0.857732	0.937323
<i>Weissella soli</i>	2.366539	0.368612	2.064603	0.178539	0.8583	0.937554
<i>Acetobacter persici</i>	6.757439	-0.20549	1.152249	-0.17834	0.858458	0.937554
<i>Enterobacter ludwigii</i>	1.206552	-0.51667	2.918451	-0.17704	0.859479	0.937906
<i>Colwellia</i> sp. PAMC 20917	14.23311	-0.19825	1.120437	-0.17694	0.859554	0.937906
<i>Brevibacterium aurantiacum</i>	558.6894	-0.08859	0.49999	-0.17718	0.859366	0.937906
<i>Pseudomonas extremorientalis</i>	43.63968	0.128477	0.751127	0.171046	0.864188	0.937973
<i>Dickeya fangzhongdai</i>	1.999349	-0.50355	2.911488	-0.17295	0.86269	0.937973
<i>Marinobacter</i> sp. CP1	12.28634	-0.17295	1.014881	-0.17041	0.864686	0.937973
<i>Acetobacterium woodii</i>	5.759189	-0.25206	1.434178	-0.17576	0.860486	0.937973
Flavobacteriaceae bacterium	6.542068	0.243866	1.412757	0.172617	0.862952	0.937973
<i>Providencia heimbachae</i>	4.437041	-0.29939	1.759333	-0.17018	0.864872	0.937973
<i>Chryseobacterium arthrosphaerae</i>	23.63576	-0.15582	0.904679	-0.17224	0.863247	0.937973
<i>Algoriphagus machipongonensis</i>	7.173504	0.224986	1.318342	0.170658	0.864492	0.937973
<i>Candidatus Nanopelagicus limnes</i>	1.064583	-0.50141	2.920077	-0.17171	0.863664	0.937973
<i>Methanocorpusculum labreanum</i>	0.875937	-0.5104	2.922527	-0.17464	0.861361	0.937973
<i>Tetragenococcus osmophilus</i>	2.688759	0.282612	1.638176	0.172516	0.863032	0.937973
<i>Pseudotherrmotoga thermarum</i>	0.408212	0.500933	2.933779	0.170747	0.864423	0.937973
<i>Thalassospira marina</i>	18.27239	-0.1066	0.606695	-0.17571	0.860524	0.937973
<i>Flavobacterium</i> sp. CJ74	11.99333	-0.13946	0.813592	-0.17142	0.863895	0.937973
<i>Enterococcus faecalis</i>	196.9074	-0.12382	0.702199	-0.17634	0.860029	0.937973

Bacillus muralis	4.004267	-0.23235	1.339706	-0.17344	0.862309	0.937973
Corynebacterium camporealensis	3741.79	0.041903	0.2444	0.171454	0.863867	0.937973
Propionibacterium virus PHL060L00	11.24133	-0.30015	1.765813	-0.16998	0.865028	0.937973
Chryseobacterium piperi	14.39492	0.162446	0.951038	0.170809	0.864374	0.937973
Anabaena sp. WA102	1.685197	0.508442	2.912367	0.17458	0.861409	0.937973
Methylobacterium zatmanii	7.673865	0.310646	1.787841	0.173755	0.862058	0.937973
Bacteroides caecimuris	72.79392	-0.15666	0.934201	-0.16769	0.866824	0.93964
Streptococcus sobrinus	25.51627	-0.15175	0.911699	-0.16645	0.867806	0.939864
Shewanella pealeana	2.825226	-0.31783	1.905733	-0.16678	0.867546	0.939864
bacterium 2013Arg42i	1.061429	0.486156	2.920147	0.166484	0.867776	0.939864
Campylobacter ureolyticus	96.5106	-0.13218	0.802473	-0.16471	0.869171	0.940327
Sulfurospirillum barnesii	3.252359	0.393077	2.389128	0.164528	0.869316	0.940327
Pectobacterium parmentieri	17.74033	-0.13232	0.801387	-0.16511	0.868854	0.940327
Moritella yayanosii	7.437845	-0.18158	1.107626	-0.16393	0.869783	0.940327
Propionibacterium virus P1001	8.138781	0.288462	1.756911	0.164187	0.869584	0.940327
Sodalis endosymbiont of Henestaris t	0.581574	-0.48427	2.928458	-0.16537	0.868655	0.940327
Lactobacillus kefiranofaciens	5.193462	-0.23679	1.451904	-0.16309	0.870445	0.940764
Dialister sp. Marseille-P5638	32.227	-0.17595	1.10165	-0.15971	0.873107	0.94171
Ignavibacterium album	8.619956	-0.16925	1.059899	-0.15968	0.873133	0.94171
Colwellia psychrerythraea	1.54146	-0.4134	2.563606	-0.16126	0.871892	0.94171
Lactobacillus crispatus	50.48906	-0.13496	0.836723	-0.16129	0.871863	0.94171
Leuconostoc mesenteroides	168.6993	-0.13337	0.834017	-0.15992	0.872947	0.94171
Erwinia billingiae	78.66198	-0.09782	0.611506	-0.15997	0.872903	0.94171
Kangiella geojedonensis	1.859181	0.336468	2.093151	0.160747	0.872292	0.94171
Bacillus pseudofirmus	3.953656	-0.20636	1.296027	-0.15923	0.87349	0.941816
Colwellia sp. Arc7-D	7.803426	-0.23293	1.485074	-0.15685	0.875365	0.942169
Gillisia sp. Hel1_33_143	5.543672	-0.19302	1.219326	-0.1583	0.874217	0.942169
Endomicrobium proavitum	1.269863	-0.45764	2.893651	-0.15815	0.874337	0.942169
Oenococcus oeni	2.631609	0.299532	1.90979	0.15684	0.875371	0.942169
Muricauda lutaonensis	4.293425	-0.2456	1.558483	-0.15759	0.874779	0.942169
Pseudoalteromonas aliena	2.049985	0.357904	2.274076	0.157384	0.874942	0.942169
Chryseobacterium carnipullorum	38.24804	0.101645	0.649654	0.15646	0.875671	0.942213
Erysipelotrichaceae bacterium SG010	10.48894	0.175397	1.126558	0.155693	0.876275	0.942585
Human polyomavirus 5	87.06769	-0.30818	1.996462	-0.15436	0.877324	0.943435
Streptomyces sp. ICC4	739.0736	0.149651	0.976448	0.153261	0.878193	0.943532
Enterococcus gallinarum	1.122953	-0.44792	2.919308	-0.15344	0.878055	0.943532
Spirochaeta africana	12.87196	0.144703	0.942737	0.153492	0.87801	0.943532
Flavobacterium crocinum	19.62746	-0.1013	0.663415	-0.15269	0.878644	0.943738
Flavobacterium sp. HYN0086	29.79099	0.148468	0.97635	0.152064	0.879137	0.943989
Lachnoclostridium phytofermentans	23.76548	0.114724	0.756815	0.151587	0.879513	0.944114
Tetragenococcus halophilus	29.63525	-0.13468	0.890566	-0.15124	0.87979	0.944133
Lactobacillus buchneri	4.010687	-0.21314	1.414661	-0.15067	0.88024	0.944337
Methylomonas clara	17.5025	0.153998	1.024446	0.150323	0.88051	0.944348
Psychrobacter sp. P2G3	17.20799	-0.22864	1.528127	-0.14962	0.881065	0.944666
Aeromonas sp. CU5	7.749173	-0.19538	1.308896	-0.14927	0.88134	0.944683
Acinetobacter sp. ADP1	32.7516	0.135031	0.907099	0.14886	0.881664	0.944751
Fusobacterium necrophorum	38.40802	-0.10613	0.715401	-0.14836	0.882062	0.9449
Dictyoglomus thermophilum	1.093265	-0.32322	2.204131	-0.14664	0.883412	0.946068
Neisseria subflava	501.8478	0.08791	0.601736	0.146095	0.883847	0.946254
Propionibacterium phage PHL085NOC	7.029518	0.224887	1.548919	0.14519	0.884561	0.946741

Scardovia inopinata	16.06705	0.133349	0.925697	0.144053	0.885459	0.947423
Exiguobacterium antarcticum	4.478952	0.196394	1.374437	0.142891	0.886377	0.948126
Capnocytophaga gingivalis	164.0044	0.084522	0.593028	0.142526	0.886664	0.948155
Chryseolinea sp. KIS68-18	62.07483	-0.0849	0.59838	-0.14189	0.887169	0.948416
Lysinibacillus sphaericus	32.77632	0.099914	0.706871	0.141347	0.887596	0.948593
Carnobacterium sp. 17-4	18.03775	-0.1233	0.87437	-0.14102	0.887856	0.948593
Leuconostoc suionicum	3.864944	0.264008	1.885587	0.140014	0.888649	0.948883
Hippea maritima	0.489219	0.410871	2.931039	0.140179	0.888518	0.948883
Propionibacterium virus Lauchelly	15.73983	0.196228	1.409968	0.139172	0.889314	0.949315
Paraliobacillus sp. X-1125	6.570954	0.182954	1.329782	0.137582	0.890571	0.950102
Actinobacillus suis	3.975317	0.214315	1.557764	0.137579	0.890573	0.950102
Moritella viscosa	6.933103	0.191086	1.40084	0.136408	0.891499	0.95069
Enterobacter cloacae complex sp.	18.88925	-0.12156	0.892352	-0.13622	0.891647	0.95069
Lactobacillus sp. BHW-4	0.952547	0.336343	2.48339	0.135437	0.892266	0.951071
Spiroplasma monobiae	0.572115	-0.39446	2.928578	-0.13469	0.892855	0.95142
Pseudomonas cerasi	1.688385	-0.33743	2.519249	-0.13394	0.893448	0.951773
Bacillus cohnii	14.32187	0.111674	0.83914	0.133082	0.894129	0.951941
Bacillus pumilus	19.31329	-0.09809	0.735303	-0.1334	0.893875	0.951941
Streptobacillus moniliformis	14.2544	-0.11602	0.878661	-0.13204	0.89495	0.952537
Lactococcus virus CB14	6.35364	-0.23407	1.778311	-0.13163	0.895281	0.95261
Carboxydocella thermautotrophica	4.188879	-0.18246	1.423461	-0.12818	0.898007	0.954224
Lactobacillus hokkaidonensis	7.080684	0.143809	1.116177	0.128841	0.897484	0.954224
Lactobacillus lindneri	3.000482	0.226477	1.759698	0.128702	0.897593	0.954224
Bacillus sp. Y1	10.59517	-0.13388	1.041422	-0.12856	0.897709	0.954224
Candidatus Izimapsasma sp. HR1	5.661131	0.16789	1.311123	0.128051	0.898109	0.954224
Propionibacterium virus PHL112N00	30.73272	0.174966	1.372925	0.127441	0.898592	0.954459
Hydromonas sp. F02	8.840887	0.160308	1.277621	0.125474	0.900149	0.955629
Corynebacterium simulans	10719.91	0.049838	0.397482	0.125385	0.900219	0.955629
Nostoc carneum	0.613572	0.365842	2.927525	0.124966	0.90055	0.955702
Propionibacterium virus ATCC29399B	3.147679	0.346647	2.818366	0.122996	0.90211	0.956881
Candidatus Azobacteroides pseudotri	8.060376	0.153023	1.249764	0.122442	0.902549	0.956881
Bacillus simplex	32.08908	-0.09488	0.776204	-0.12223	0.902713	0.956881
Staphylococcus virus 37	0.668978	0.35819	2.926355	0.122402	0.902581	0.956881
Chryseobacterium bernardetii	34.35544	-0.08533	0.70023	-0.12186	0.90301	0.956917
Thermus scotoductus	36.26347	-0.07722	0.641738	-0.12033	0.904221	0.957085
Pseudomonas sp. Os17	2.281266	-0.35212	2.908934	-0.12105	0.903654	0.957085
Propionibacterium virus MrAK	23.75985	0.241796	2.000923	0.120842	0.903816	0.957085
Pseudomonas protegens	207.1108	-0.06643	0.5518	-0.12038	0.904181	0.957085
Vibrio parahaemolyticus	43.45848	-0.07944	0.667229	-0.11907	0.905224	0.95759
Streptococcus ferus	11.17969	-0.1518	1.271808	-0.11936	0.904991	0.95759
Pseudomonas rhizosphaerae	62.74324	0.073414	0.622597	0.117915	0.906135	0.957836
Acinetobacter defluvii	31.75262	-0.1039	0.88278	-0.1177	0.906306	0.957836
Human papillomavirus KC5	3.381131	0.303524	2.58444	0.117443	0.906509	0.957836
Sulfurimonas denitrificans	0.835584	-0.29936	2.545316	-0.11761	0.906376	0.957836
Clostridium isatidis	14.83776	0.102216	0.873571	0.117009	0.906853	0.957921
Lactobacillus sp. CBA3606	0.617972	0.337826	2.927389	0.115402	0.908127	0.95871
Staphylococcus phage phiRS7	2.812828	-0.25547	2.213047	-0.11544	0.908096	0.95871
Simkania negevensis	0.359631	0.336715	2.935204	0.114716	0.90867	0.959006
Propionibacterium virus ATCC29399B	23.65383	-0.229	2.010541	-0.1139	0.909318	0.959411
Campylobacter cuniculorum	0.920229	-0.2831	2.494203	-0.1135	0.909631	0.959463

Polaribacter sp. KT 15	2.455734	0.271353	2.416522	0.112291	0.910593	0.960199
Clostridium tyrobutyricum	19.69631	-0.09104	0.829732	-0.10973	0.912626	0.962064
Propionibacterium virus PHL141N00	12.12973	-0.1728	1.603174	-0.10778	0.914168	0.962296
Microbacterium paraoxydans	476.1273	0.085927	0.795534	0.108012	0.913986	0.962296
Actinotignum schaalii	171.8556	-0.05524	0.507157	-0.10892	0.913262	0.962296
Fictibacillus phosphorivorans	5.312653	0.139015	1.283542	0.108306	0.913753	0.962296
Staphylococcus auricularis	251.5962	-0.06755	0.621715	-0.10865	0.913484	0.962296
Nostoc linckia	16.68998	0.109236	1.027871	0.106274	0.915365	0.962937
Bacillus sp. FJAT-18017	8.44677	-0.11082	1.050496	-0.1055	0.915983	0.962937
Candidatus Planktophilia vernalis	0.579394	0.310477	2.928284	0.106027	0.915561	0.962937
Solibacillus silvestris	8.795739	0.102779	0.974707	0.105446	0.916022	0.962937
Acinetobacter bereziniae	40.5431	0.082724	0.785242	0.105348	0.9161	0.962937
Enterobacter sp. Crenshaw	0.768553	-0.30553	2.924038	-0.10449	0.916781	0.963374
Propionibacterium virus PHL114L00	18.45791	-0.16764	1.632401	-0.1027	0.918205	0.964314
Salinimonas sp. HMF8227	4.372278	-0.14931	1.452449	-0.1028	0.918121	0.964314
Propionibacterium virus P104A	11.11488	-0.20261	1.983879	-0.10213	0.918656	0.964509
Gammapapillomavirus 24	2.04043	0.292318	2.909087	0.100485	0.91996	0.96556
Gluconobacter albidus	6.241471	-0.11702	1.167888	-0.1002	0.920188	0.96556
Mycoplasma penetrans	4.903006	0.145914	1.481646	0.098481	0.92155	0.965876
Phaeobacter inhibens	36.51103	0.062866	0.636991	0.098693	0.921382	0.965876
Rhizobium sp. S41	140.0008	0.119015	1.204928	0.098774	0.921318	0.965876
Calothrix sp. NIES-3974	6.265266	-0.14342	1.452865	-0.09871	0.921366	0.965876
Enterobacter sp. E20	1.03001	-0.28246	2.920252	-0.09672	0.922946	0.966552
Gloeomargarita lithophora	5.152177	-0.13233	1.373656	-0.09633	0.923258	0.966552
Flavobacterium faecale	12.06797	0.127044	1.30845	0.097095	0.922651	0.966552
Glutamicibacter nicotianae	154.392	-0.03736	0.386961	-0.09654	0.923091	0.966552
Erysipelothrix rhusiopathiae	27.78657	-0.07124	0.748221	-0.09522	0.924142	0.967199
Sedimentisphaera cyanobacteriorum	0.841646	0.256974	2.92303	0.087914	0.929945	0.967984
Salinibacterium sp. CGMCC 1.16371	81.47531	-0.04389	0.479506	-0.09154	0.927063	0.967984
Runella sp. SP2	12.17396	-0.08823	0.954942	-0.0924	0.926382	0.967984
Clostridium sp. BNL1100	8.957877	0.095142	1.052271	0.090416	0.927956	0.967984
Zobellia galactanivorans	5.529271	0.10587	1.202117	0.08807	0.929821	0.967984
Candidatus Methanomethylophilus a	0.480921	-0.27422	2.930922	-0.09356	0.925458	0.967984
Corynebacterium flavescens	2591.012	-0.02393	0.265123	-0.09026	0.928084	0.967984
Sphingomonas taxi	218.458	-0.046	0.521129	-0.08827	0.929658	0.967984
Alphapapillomavirus 2	5.397106	0.22766	2.496325	0.091198	0.927335	0.967984
Xenorhabdus doucetiae	9.842655	0.091028	1.001887	0.090856	0.927607	0.967984
Bifidobacterium adolescentis	297.7237	-0.05494	0.609919	-0.09007	0.928231	0.967984
Rhodococcus sp. 2G	57.5208	0.111009	1.252796	0.088609	0.929393	0.967984
Megasphaera stantonii	10.4156	0.087371	0.94693	0.092268	0.926485	0.967984
Gammapapillomavirus 8	2.06058	0.241923	2.715981	0.089074	0.929023	0.967984
Pseudomonas mediterranea	26.52268	-0.06853	0.756379	-0.0906	0.927813	0.967984
Thermococcus eurythermalis	0.253701	-0.26591	2.937574	-0.09052	0.927875	0.967984
Leptotrichia sp. oral taxon 847	20.98966	-0.08194	0.923148	-0.08876	0.929272	0.967984
Vibrio mediterranei	4.254875	0.134889	1.478979	0.091204	0.927331	0.967984
Thermus brockianus	2.593819	-0.15721	1.749942	-0.08984	0.928416	0.967984
Propionibacterium virus PHL092M00	43.29055	0.116094	1.328239	0.087405	0.93035	0.968128
Paenibacillus sp. BIHB4019	8.286873	-0.10905	1.259221	-0.0866	0.930986	0.968513
Staphylococcus piscifermentans	16.41086	0.068453	0.802472	0.085303	0.932021	0.968872
Erwinia tasmaniensis	11.30301	-0.09393	1.10295	-0.08516	0.93213	0.968872

Enterococcus hirae	7.12692	-0.09654	1.126872	-0.08567	0.93173	0.968872
Rhodoluna laticola	10.30151	0.062777	0.741782	0.08463	0.932556	0.969038
Murdochiella vaginalis	148.8368	0.059178	0.703625	0.084105	0.932973	0.969195
Erwinia sp. Ejp617	1.269311	0.243419	2.917152	0.083444	0.933498	0.969464
Christensenella massiliensis	7.5588	-0.11374	1.388497	-0.08191	0.934715	0.970173
Acinetobacter sp. LoGeW2-3	27.59901	0.067988	0.828473	0.082065	0.934595	0.970173
Dickeya solani	3.099263	-0.16483	2.031176	-0.08115	0.935322	0.970527
Kangiella profunda	2.473937	0.153599	1.918058	0.080081	0.936173	0.971133
Bacillus sp. X1(2014)	2.691248	0.136967	1.748785	0.078321	0.937573	0.972272
Lactobacillus johnsonii	26.95435	-0.05554	0.711781	-0.07803	0.937805	0.972272
Xanthomonas fragariae	26.14016	-0.04309	0.565784	-0.07615	0.939297	0.973541
Desulfocapsa sulfexigens	1.029351	-0.18546	2.458193	-0.07545	0.939859	0.973846
Lysinimonas sp. 2DFWR-13	166.9952	-0.0389	0.521486	-0.0746	0.940534	0.973991
Fervidobacterium pennivorans	1.172608	-0.19858	2.660908	-0.07463	0.940511	0.973991
Tenacibaculum mesophilum	3.929503	0.161272	2.185528	0.073791	0.941177	0.974379
Yersinia pseudotuberculosis	0.983462	-0.21223	2.920809	-0.07266	0.942075	0.975031
Listeria innocua	6.940779	-0.10381	1.473818	-0.07044	0.943845	0.976356
Bacillus foraminis	5.922461	-0.09221	1.310236	-0.07038	0.943891	0.976356
Enterococcus wangshanyuanii	13.9999	-0.05985	0.860291	-0.06957	0.944535	0.976744
Citrobacter freundii	69.12152	-0.06225	0.912692	-0.0682	0.945622	0.977591
Tobacco vein clearing virus	3.496666	0.159904	2.381531	0.067144	0.946467	0.978187
Pasteurellaceae bacterium NI1060	5.982181	-0.0809	1.225966	-0.06599	0.947389	0.978862
Lactobacillus curvatus	154.3112	0.045819	0.722937	0.063378	0.949465	0.980449
Serratia sp. SSNIH1	1.457547	0.184767	2.915028	0.063384	0.94946	0.980449
Fusobacterium hwasookii	34.3911	0.045382	0.734543	0.061783	0.950736	0.980852
Candidatus Hamiltonella defensa	6.358203	0.102928	1.673501	0.061504	0.950957	0.980852
Chlamydia sp. 2742-308	0.442258	0.181948	2.93242	0.062047	0.950525	0.980852
Lactococcus phage jm3	5.511605	0.109202	1.784454	0.061197	0.951203	0.980852
Elizabethkingia bruuniana	3.320574	-0.12551	2.019517	-0.06215	0.950446	0.980852
Thermoanaerobacterales bacterium 5	5.440398	-0.06429	1.114731	-0.05768	0.954007	0.981949
Bacillus jeotgali	7.133047	0.074898	1.302828	0.057489	0.954156	0.981949
Thermosynechococcus sp. NK55a	1.616312	0.121218	2.100157	0.057718	0.953973	0.981949
Sodalis praecaptivus	16.44283	-0.06119	1.043759	-0.05862	0.953252	0.981949
Candidatus Pelagibacter sp. HIMB132	3.049867	-0.11055	1.907608	-0.05795	0.953787	0.981949
Moraxella osloensis	25438.99	0.033711	0.578072	0.058316	0.953497	0.981949
Pseudomonas sp. JY-Q	3.396001	-0.11881	2.028112	-0.05858	0.953285	0.981949
Propionibacterium virus Procrass1	5.297636	-0.08075	1.413992	-0.05711	0.954461	0.981986
Providencia rettgeri	15.48054	0.049992	0.888783	0.056248	0.955144	0.982411
Acinetobacter nosocomialis	49.32213	-0.04106	0.735905	-0.0558	0.955502	0.982501
uncultured crAssphage	0.995594	0.159899	2.920815	0.054745	0.956342	0.982809
Lysinibacillus sp. 2017	4.384916	0.065329	1.187016	0.055036	0.956109	0.982809
Paenibacillus sp. Y412MC10	5.207906	0.073045	1.34785	0.054194	0.956781	0.982983
Vibrio tasmaniensis	3.167921	-0.10884	2.027455	-0.05369	0.957186	0.98301
Lactobacillus fermentum	57.20131	0.042772	0.799732	0.053483	0.957347	0.98301
Deinococcus radiodurans	103.371	0.03403	0.641073	0.053083	0.957666	0.98306
Desulfitobacterium dichloroeliminans	5.643478	-0.08957	1.768382	-0.05065	0.959605	0.984495
Desulfovibrio hydrothermalis	1.652632	0.09969	1.955334	0.050983	0.959339	0.984495
Legionella lansingensis	6.447443	0.074324	1.495019	0.049714	0.96035	0.984774
Coraliomargarita akajimensis	1.131628	0.109023	2.196798	0.049628	0.960419	0.984774
Serratia sp. P2ACOL2	11.98418	0.066226	1.361927	0.048627	0.961217	0.985315

Photorhabdus laumondii	5.045505	-0.06635	1.374255	-0.04828	0.961494	0.985321
Leuconostoc kimchii	4.808677	-0.1287	2.69905	-0.04768	0.961969	0.985531
Winogradskyella sp. J14-2	2.932742	-0.08439	1.78468	-0.04729	0.962285	0.985577
Chryseobacterium joostei	15.15772	-0.05037	1.076054	-0.04681	0.962668	0.985692
Rhodococcus sp. BH4	67.74868	-0.04665	1.009316	-0.04622	0.963136	0.985893
Tessaracoccus sp. Marseille-P5995	416.3434	0.027169	0.598575	0.045389	0.963797	0.986293
Dickeya zeae	43.96457	0.021378	0.475989	0.044912	0.964177	0.986405
Anaerolineaceae bacterium oral taxo	6.7511	-0.05881	1.376331	-0.04273	0.965916	0.986916
Thermodesulfobacterium geofontis	0.884575	-0.12019	2.785944	-0.04314	0.965589	0.986916
Enterobacter sp. R4-368	4.80067	-0.05887	1.370769	-0.04294	0.965747	0.986916
Citrobacter braakii	2.337661	-0.11509	2.645008	-0.04351	0.965293	0.986916
Colwellia sp. MT41	2.977952	0.071597	1.681313	0.042584	0.966033	0.986916
Bacillus xiamenensis	1.289774	0.090948	2.171549	0.041882	0.966593	0.987211
Salimicrobium jeotgali	0.654661	-0.12098	2.926303	-0.04134	0.967023	0.987315
Sediminispirochaeta smaragdinae	0.916883	-0.09304	2.265323	-0.04107	0.967238	0.987315
Bacillus flexus	13.33991	0.042743	1.054943	0.040517	0.967681	0.98749
Acinetobacter pittii	296.8867	0.020814	0.520064	0.040022	0.968076	0.987617
Dokdonia sp. 4H-3-7-5	0.692705	-0.11451	2.925447	-0.03914	0.968776	0.988054
Entomoplasma luminosum	2.185939	0.087463	2.271854	0.038499	0.96929	0.988301
Gemella morbillorum	261.2665	0.020006	0.539033	0.037114	0.970394	0.989086
Leptotrichia sp. oral taxon 498	41.27761	0.025876	0.702167	0.036851	0.970604	0.989086
Streptococcus mutans	371.7959	-0.02582	0.709394	-0.0364	0.970963	0.989176
Chryseobacterium glaciei	19.75911	-0.03239	0.902659	-0.03588	0.971377	0.98932
Thermovibrio ammonificans	0.870763	-0.0986	2.796009	-0.03527	0.971868	0.989528
Lawsonella clevelandensis	3725.84	0.017658	0.505342	0.034943	0.972125	0.989528
Propionibacterium virus PA6	33.65728	0.045962	1.338504	0.034338	0.972607	0.989742
Chlorobium phaeobacteroides	1.373599	0.079405	2.353006	0.033746	0.973079	0.989946
Chroococciopsis thermalis	7.742458	0.040166	1.211787	0.033146	0.973558	0.990156
Shewanella livingstonensis	4.103694	-0.04967	1.564527	-0.03175	0.974674	0.990651
Snodgrassella alvi	30.94269	-0.02563	0.813336	-0.03151	0.974861	0.990651
Chamaesiphon minutus	1.487415	0.081605	2.567569	0.031783	0.974645	0.990651
Bifidobacterium pseudocatenulatum	61.65321	0.026916	0.878632	0.030634	0.975561	0.991086
Lactococcus phage jm2	7.633806	0.045838	1.523255	0.030092	0.975994	0.991248
Planococcus versutus	7.358082	0.042241	1.483755	0.028469	0.977288	0.992285
Moraxella bovoculi	18.55434	-0.03321	1.243898	-0.0267	0.9787	0.992482
Marinobacter salinus	10.76016	0.027643	1.106516	0.024982	0.980069	0.992482
Elizabethkingia meningoseptica	17.28052	0.020422	0.752809	0.027128	0.978358	0.992482
Herbinix luporum	12.21892	-0.02637	1.140058	-0.02313	0.981545	0.992482
Elizabethkingia ursingii	3.087138	0.052385	2.046365	0.025599	0.979577	0.992482
Seonamhaeicola sp. S2-3	12.12459	0.023963	1.055031	0.022713	0.981879	0.992482
Leptotrichia buccalis	130.8253	0.013931	0.569009	0.024483	0.980467	0.992482
Helicobacter bilis	4.914937	-0.04878	2.176363	-0.02241	0.982118	0.992482
Exiguobacterium sp. MH3	25.02821	-0.03381	1.323096	-0.02555	0.979615	0.992482
Salegentibacter salegens	5.739384	0.029577	1.295469	0.022831	0.981785	0.992482
Propionibacterium virus PHL009M11	16.3902	-0.05554	2.469643	-0.02249	0.982059	0.992482
Brevundimonas diminuta	366.2214	0.011077	0.484091	0.022883	0.981744	0.992482
Sphingobacterium sp. G1-14	85.61734	-0.02483	0.912971	-0.0272	0.978301	0.992482
Candidatus Baumannia cicadellinicola	2.995057	0.042778	1.772752	0.024131	0.980748	0.992482
Propionibacterium phage Enoki	13.50284	0.035349	1.381135	0.025594	0.979581	0.992482
Paenibacillus sp. FSL R5-0912	1.713079	-0.05382	2.294109	-0.02346	0.981282	0.992482

Aneurinibacillus sp. XH2	2.45432	-0.0452	1.899461	-0.0238	0.981013	0.992482
Bacillus wiedmannii	2.849854	-0.04836	2.235116	-0.02164	0.982738	0.992767
Francisella sp. FSC1006	2.232749	-0.04102	1.918752	-0.02138	0.982946	0.992767
[Eubacterium] sulci	53.66976	0.017073	0.83649	0.02041	0.983716	0.993118
Colwellia sp. PAMC 21821	2.737147	-0.03544	1.779484	-0.01991	0.984112	0.993118
Megamonas hypermegale	9.962252	0.021262	1.058266	0.020091	0.983971	0.993118
Bifidobacterium kashiwanohense	51.54783	-0.0137	0.719658	-0.01903	0.984816	0.993552
Candidatus Nanopelagicus hibericus	1.005446	0.054208	2.92061	0.018561	0.985192	0.993656
Gordonia polyisoprenivorans	269.9859	-0.0062	0.355381	-0.01744	0.986087	0.994284
Lactobacillus farciminis	3.757794	-0.02026	1.43368	-0.01413	0.988725	0.994335
Alkaliphilus metalliredigens	14.50697	-0.01483	0.909373	-0.01631	0.986986	0.994335
Formosa sp. Hel1_31_208	3.793889	0.024021	1.76539	0.013607	0.989144	0.994335
Halobacteriovorax sp. BALOs_7	3.660978	0.02447	1.755877	0.013936	0.988881	0.994335
Pseudomonas sp. TKP	2.207399	-0.03832	2.683146	-0.01428	0.988605	0.994335
Mycoplasma edwardii	2.799243	0.034025	2.411187	0.014111	0.988741	0.994335
Mycobacterium ulcerans	59.11031	-0.02172	1.370528	-0.01585	0.987354	0.994335
Psychrobacter arcticus	24.46412	-0.014	0.875988	-0.01598	0.987252	0.994335
Acinetobacter larvae	13.34783	0.02091	1.275749	0.01639	0.986923	0.994335
Treponema primitia	7.243825	0.01665	1.118864	0.014881	0.988127	0.994335
Erysipelothrix larvae	9.774439	-0.01756	1.2018	-0.01462	0.988339	0.994335
Flavobacterium johnsoniae	51.52706	-0.00806	0.64035	-0.01259	0.989952	0.994873
Chryseobacterium haifense	46.71053	-0.00875	0.813006	-0.01077	0.99141	0.995657
Propionibacterium virus PHL071N05	14.05821	0.018098	1.76678	0.010244	0.991827	0.995657
Salinispora tropica	42.92157	-0.00508	0.489356	-0.01037	0.991724	0.995657
Streptococcus sp. I-G2	68.09921	0.007192	0.684907	0.010501	0.991622	0.995657
Mesoplasma entomophilum	1.60533	-0.02585	2.802152	-0.00922	0.99264	0.996199
Pseudomonas sp. 31-12	28.2637	-0.00564	0.643619	-0.00876	0.993008	0.996293
Pseudomonas silesiensis	51.96662	0.00369	0.518363	0.007119	0.99432	0.997335
Desulfofarcimen acetoxidans	4.516637	-0.00854	1.358617	-0.00628	0.994987	0.997428
Gemella sp. ND 6198	5.290717	-0.0149	2.293333	-0.0065	0.994816	0.997428
Chryseobacterium indologenes	142.9793	-0.00356	0.617804	-0.00577	0.995397	0.997428
Thermincola potens	4.425507	-0.00771	1.369081	-0.00563	0.995509	0.997428
Candidatus Pelagibacter sp. IMCC906	0.989955	-0.00821	2.481651	-0.00331	0.997361	0.999008
Clostridium sporogenes	113.2139	-0.00014	0.950962	-0.00015	0.999878	0.999887
Photorhabdus thracensis	8.934541	0.001464	1.115858	0.001312	0.998953	0.999887
Marinobacter psychrophilus	0.614846	0.000413	2.927245	0.000141	0.999887	0.999887
Chania multitudinisentens	7.971025	0.002148	1.167765	0.00184	0.998532	0.999887
Pseudomonas sp. R11-23-07	2.443808	0.002417	2.901114	0.000833	0.999335	0.999887
Legionella clemsonensis	2.756605	-0.00083	1.551475	-0.00054	0.999573	0.999887

	baseMean	log2FoldCh	lfcSE	stat	pvalue	padj
Bordetella pertussis	168.6469	-27.059	2.531905	-10.6872	1.17E-26	4.25E-23
Streptomyces sp. PVA 94-07	13.58082	-23.6226	2.511117	-9.40722	5.09E-21	9.27E-18
Methylobacterium oryzae	5.715724	-22.4231	2.413935	-9.28901	1.56E-20	1.89E-17
Serratia sp. LS-1	5.553945	-22.401	2.452874	-9.13255	6.69E-20	6.08E-17
Enterobacteriaceae bacterium ENNIH2	15.22691	-23.7799	2.921655	-8.13921	3.98E-16	2.72E-13
Burkholderia mallei	14.79097	-23.7378	2.921668	-8.12476	4.48E-16	2.72E-13
Streptomyces sp. SM17	7.981915	-20.9761	2.849455	-7.36144	1.82E-13	9.46E-11
Achromobacter ruhlandii	89.1919	-8.22777	1.777764	-4.62815	3.69E-06	0.001678
Pseudomonas sp. St29	11.43776	-5.35294	1.356342	-3.9466	7.93E-05	0.032042
Pseudomonas sp. A214	12.16837	-5.49927	1.426912	-3.85396	0.000116	0.042281
Pectobacterium polaris	8.751919	-5.08193	1.427456	-3.56013	0.000371	0.122592
Clostridium botulinum	456.6923	1.354896	0.383196	3.535775	0.000407	0.123262
Streptomyces sampsonii	13.51615	-5.83497	1.668742	-3.49663	0.000471	0.131858
Streptomyces lividans	11.87456	-6.61083	1.933129	-3.41975	0.000627	0.162872
Streptococcus dysgalactiae	2222.445	3.456461	1.035554	3.33779	0.000844	0.188333
Geoalkalibacter subterraneus	25.63352	-1.78476	0.536559	-3.3263	0.00088	0.188333
Clostridium pasteurianum	88.3911	1.979089	0.593534	3.334418	0.000855	0.188333
Alcanivorax sp. N3-2A	36.89105	-2.06229	0.63516	-3.24688	0.001167	0.203237
Clostridium saccharoperbutylacetonicum	46.73938	2.150106	0.66744	3.221423	0.001276	0.203237
Borrelia miyamotoi	35.47271	3.114591	0.96233	3.236509	0.00121	0.203237
Pseudoflavitalea sp. 5GH32-13	115.3256	-1.69652	0.526979	-3.21933	0.001285	0.203237
Sphaerobacter thermophilus	69.92268	-1.66564	0.506493	-3.28858	0.001007	0.203237
Pseudomonas mosselii	10.40075	-4.43524	1.362083	-3.25622	0.001129	0.203237
Rhodomicrobium vannielii	29.59899	-2.0752	0.649421	-3.19546	0.001396	0.206063
Methylomicrobium album	30.12784	-1.74668	0.547316	-3.19136	0.001416	0.206063
Staphylococcus simiae	132.67	1.697293	0.5361	3.165999	0.001546	0.216253
Kosakonia radicincitans	7.82992	-5.04277	1.85056	-2.725	0.00643	0.224107
Spiribacter curvatus	10.35297	-2.10226	0.864398	-2.43205	0.015014	0.224107
Xylanimonas cellulositytica	137.1303	-0.91751	0.381865	-2.4027	0.016275	0.224107
Acidimicrobium ferrooxidans	23.26258	-1.91107	0.736444	-2.595	0.009459	0.224107
Geobacter pickeringii	36.82908	-1.56126	0.606102	-2.5759	0.009998	0.224107
Burkholderia metallica	248.6665	-1.41342	0.556534	-2.53969	0.011095	0.224107
Halobacterium salinarum	14.70663	-2.20113	0.91074	-2.41686	0.015655	0.224107
Bradymonas sediminis	29.63995	-1.7617	0.634467	-2.77666	0.005492	0.224107
Xanthomonas oryzae	41.13327	-1.36206	0.540926	-2.51802	0.011802	0.224107
Burkholderia sp. RPE67	314.5218	-1.53412	0.605614	-2.53316	0.011304	0.224107
Azoarcus sp. DN11	140.899	-1.44447	0.518906	-2.78368	0.005375	0.224107
Candidatus Koribacter versatilis	55.69674	-1.38338	0.530398	-2.60819	0.009102	0.224107
Halotalea alkalilenta	38.02159	-1.70741	0.61524	-2.7752	0.005517	0.224107
Acaryochloris marina	16.6701	-2.28419	0.948355	-2.40858	0.016015	0.224107
Komagataeibacter xylinus	46.57891	-2.51754	0.921638	-2.73159	0.006303	0.224107
Gibbsiella quercinecans	35.90542	-1.40662	0.580321	-2.42387	0.015356	0.224107
Fibrella sp. ES10-3-2-2	12.48747	-2.55835	0.894399	-2.86041	0.004231	0.224107
Hoeflea phototrophica	23.54012	-1.90729	0.741713	-2.57147	0.010127	0.224107
Clostridium tetani	31.0347	1.835378	0.707325	2.594817	0.009464	0.224107
Herbaspirillum seropedicae	281.929	-1.35456	0.485463	-2.79024	0.005267	0.224107
Mycoplasma mycoides	11.86656	3.589371	1.462071	2.454992	0.014089	0.224107
Collimonas arenae	192.9469	-1.42649	0.521306	-2.73638	0.006212	0.224107
Bradyrhizobium sp. ORS 3257	294.1028	-1.41598	0.539231	-2.62592	0.008642	0.224107
Thiocystis violascens	42.58135	-1.73942	0.636023	-2.73484	0.006241	0.224107

Burkholderia oklahomensis	183.6459	-1.42531	0.531557	-2.68138	0.007332	0.224107
Halobacillus halophilus	13.77836	-2.47951	0.937193	-2.64568	0.008153	0.224107
Serratia sp. FGI94	14.49972	-2.59648	1.039047	-2.49891	0.012458	0.224107
Kitasatospora setae	110.9923	-0.89525	0.365408	-2.44999	0.014286	0.224107
Clostridium beijerinckii	110.8038	1.515949	0.562076	2.697053	0.006996	0.224107
Nitrospira defluvii	15.48937	-2.43122	0.83008	-2.92889	0.003402	0.224107
Dehalogenimonas formicexedens	11.2464	-2.49264	0.967946	-2.57518	0.010019	0.224107
Candidatus Promineofilum breve	43.72492	-1.41938	0.547507	-2.59243	0.00953	0.224107
Halomonas chromatireducens	15.85056	-1.83618	0.672856	-2.72893	0.006354	0.224107
Hyphomicrobium nitrativorans	44.41045	-1.98234	0.66991	-2.95911	0.003085	0.224107
Cystobacter fuscus	157.3627	-0.94409	0.394486	-2.39323	0.016701	0.224107
Rhizobium sp. CIAT894	36.71597	-1.98738	0.675231	-2.94327	0.003248	0.224107
Burkholderia seminalis	223.2325	-1.3339	0.530215	-2.51577	0.011877	0.224107
Komagataeibacter europaeus	13.5014	-2.39926	0.851444	-2.81788	0.004834	0.224107
Bradyrhizobiaceae bacterium SG-6C	122.1328	-1.52811	0.524271	-2.91474	0.00356	0.224107
Cloacibacillus porcorum	12.83235	-2.44859	0.835742	-2.92984	0.003391	0.224107
Halomicrobium mukohataei	10.71414	-2.84495	0.991777	-2.86854	0.004124	0.224107
Desulfococcus multivorans	16.38143	-2.22387	0.903366	-2.46176	0.013826	0.224107
Bordetella trematum	95.39385	-1.30766	0.536072	-2.43934	0.014714	0.224107
Agrobacterium vitis	40.8151	-1.60629	0.550412	-2.91835	0.003519	0.224107
Staphylococcus sp. M0911	428.3082	1.661865	0.58572	2.837301	0.00455	0.224107
Echinicola strongylocentroti	10.26174	-2.73472	1.104525	-2.47593	0.013289	0.224107
Caldisphaera lagunensis	3.236013	5.763062	2.402939	2.398339	0.01647	0.224107
Flavisolibacter tropicus	47.45105	-1.50273	0.581036	-2.58629	0.009701	0.224107
Methylomicrobium sp. wino1	9.102564	-3.01106	1.041565	-2.8909	0.003841	0.224107
Burkholderia territorii	336.6107	-1.50177	0.578499	-2.59599	0.009432	0.224107
Xanthomonas sacchari	96.88559	-1.23297	0.488301	-2.52502	0.011569	0.224107
Haloarcula sp. CBA1115	4.482871	-4.24894	1.615442	-2.6302	0.008533	0.224107
Paraburkholderia sprentiae	852.0856	-1.27776	0.526304	-2.42779	0.015191	0.224107
Cupriavidus pauculus	583.6967	-1.47123	0.531997	-2.76548	0.005684	0.224107
Caulobacter henricii	62.36509	-1.29668	0.533851	-2.42892	0.015144	0.224107
Limnohabitans sp. 103DPR2	54.30918	-1.40602	0.56621	-2.48321	0.013021	0.224107
Turneriella parva	11.18765	-2.01243	0.839531	-2.39709	0.016526	0.224107
Bacillus oceanisediminis	15.10755	-1.91048	0.78986	-2.41876	0.015573	0.224107
Pandoraea thiooxydans	225.6205	-1.34141	0.504639	-2.65816	0.007857	0.224107
Phaeobacter sp. LSS9	4.787443	-4.34088	1.632968	-2.65828	0.007854	0.224107
Caulobacter mirabilis	124.2431	-1.33312	0.531042	-2.51038	0.01206	0.224107
Lacunisphaera limnophila	56.50022	-1.58933	0.614751	-2.58533	0.009729	0.224107
Bordetella genomosp. 13	167.2058	-1.37202	0.50687	-2.70684	0.006793	0.224107
Pseudomonas sp. GR 6-02	17.51244	-3.273	1.220748	-2.68114	0.007337	0.224107
Libanicoccus massiliensis	33.71358	-1.66501	0.647436	-2.57169	0.01012	0.224107
Desulfuromonas sp. DDH964	32.50297	-1.44361	0.553884	-2.60633	0.009152	0.224107
Anaeromyxobacter sp. Fw109-5	110.3319	-1.26684	0.480295	-2.63763	0.008349	0.224107
Alcanivorax xenomutans	29.11469	-1.62238	0.661532	-2.45245	0.014189	0.224107
Granulicella mallensis	58.99086	-1.29065	0.519609	-2.48388	0.012996	0.224107
Geobacter sp. M21	19.77467	-1.76605	0.712983	-2.47699	0.01325	0.224107
Cyanobium sp. NIES-981	61.175	-1.59604	0.586871	-2.71958	0.006537	0.224107
Flammeovirgaceae bacterium 311	10.91514	-2.025	0.824953	-2.45469	0.014101	0.224107
Collimonas fungivorans	295.3755	-1.143	0.461441	-2.47703	0.013248	0.224107
Streptomyces venezuelae	169.6691	-0.94583	0.346253	-2.7316	0.006303	0.224107

Shingobium sp. RAC03	80.23206	-1.51441	0.611	-2.47857	0.013191	0.224107
Thauera hydrothermalis	224.3951	-1.46631	0.586054	-2.50201	0.012349	0.224107
Herminiimonas arsenicoxydans	78.81154	-1.59131	0.588896	-2.70219	0.006888	0.224107
Rhizobium sp. NXC14	31.51846	-1.46653	0.561315	-2.61267	0.008984	0.224107
Clostridium perfringens	93.67786	1.164571	0.484188	2.405207	0.016163	0.224107
Acidianus brierleyi	3.853375	5.928903	2.351279	2.521565	0.011683	0.224107
Afipia sp. GAS231	261.6527	-1.20287	0.481276	-2.49933	0.012443	0.224107
Cupriavidus necator	1629.097	-1.24597	0.517412	-2.40807	0.016037	0.224107
Desulfomicrobium baculatum	18.01281	-1.62133	0.642867	-2.52203	0.011668	0.224107
Fluviicola taffensis	9.970238	-2.29364	0.941265	-2.43677	0.014819	0.224107
Enterobacteriaceae bacterium w6	13.24374	-3.74665	1.288795	-2.9071	0.003648	0.224107
Zoogloeaceae bacterium Par-f-2	45.62121	-2.08803	0.709717	-2.94206	0.00326	0.224107
Synechococcus sp. KORDI-49	9.668227	-2.79142	1.063184	-2.62553	0.008651	0.224107
Aquabacterium olei	450.8692	-1.44249	0.557711	-2.58644	0.009697	0.224107
Lactobacillus paracollinoides	10.3205	-2.48505	1.002636	-2.47852	0.013193	0.224107
Betaproteobacteria bacterium GR16-43	108.8443	-1.41033	0.502854	-2.80465	0.005037	0.224107
Nitratireductor basaltis	16.9458	-2.47331	0.84649	-2.92184	0.00348	0.224107
Burkholderia glumae	361.8653	-1.24674	0.516177	-2.41533	0.015721	0.224107
Methylococcus capsulatus	63.60805	-1.63782	0.579487	-2.82632	0.004709	0.224107
Ectothiorhodospira sp. BSL-9	32.48223	-1.32597	0.537823	-2.46545	0.013684	0.224107
Verrucomicrobium sp. GAS474	40.57865	-1.36045	0.566545	-2.40131	0.016336	0.224107
Micavibrio aeruginosavorus	12.94135	-2.38116	0.980187	-2.42929	0.015128	0.224107
Sulfurimonas autotrophica	2.545619	5.717671	2.099057	2.723924	0.006451	0.224107
Limnohabitans sp. 63ED37-2	217.835	-1.3376	0.552492	-2.42102	0.015477	0.224107
Ralstonia solanacearum	27971.97	-1.34916	0.514882	-2.62033	0.008784	0.224107
Acetobacter ascendens	11.83898	-2.45102	1.014238	-2.41662	0.015666	0.224107
Klebsiella quasivariicola	9.252937	-2.58435	1.026845	-2.51679	0.011843	0.224107
Rhodobacteraceae bacterium BAR1	19.20399	-1.91635	0.780461	-2.45541	0.014073	0.224107
Tolomonas auensis	10.08586	-2.4149	0.869354	-2.77781	0.005473	0.224107
Campylobacter curvus	6.989436	-2.89255	1.152646	-2.50949	0.012091	0.224107
Phreatobacter cathodiphilus	130.9256	-1.2503	0.423204	-2.95437	0.003133	0.224107
Desulfomicrobium orale	20.50755	-1.69204	0.63172	-2.67847	0.007396	0.224107
Sulfuriferula sp. AH1	21.2083	-1.86173	0.708181	-2.62889	0.008566	0.224107
Bradyrhizobium diazoefficiens	599.8436	-1.39306	0.523053	-2.66333	0.007737	0.224107
Yoonia vestfoldensis	27.89043	-1.54594	0.641449	-2.41008	0.015949	0.224107
Achromobacter denitrificans	304.6644	-1.16281	0.486364	-2.39083	0.01681	0.224107
Hyphomicrobium denitrificans	71.18123	-1.49688	0.54633	-2.73989	0.006146	0.224107
Bradyrhizobium lablabi	753.1273	-1.4308	0.572384	-2.49972	0.012429	0.224107
Pseudomonas alcaliphila	49.05745	-1.7324	0.69112	-2.50665	0.012188	0.224107
Burkholderia sp. MSMB617WGS	13.2015	-3.75676	1.281442	-2.93166	0.003372	0.224107
Paucibacter sp. KCTC 42545	808.868	-1.30175	0.512278	-2.5411	0.011051	0.224107
Novosphingobium tardaugens	38.58774	-1.46289	0.607625	-2.40755	0.01606	0.224107
Ralstonia pseudosolanacearum	1274.513	-1.47793	0.614207	-2.40623	0.016118	0.224107
Paenibacillus mucilaginosus	41.68867	-1.55613	0.648695	-2.39886	0.016446	0.224107
Rhodopirellula baltica	7.411003	-2.62874	1.042627	-2.52127	0.011693	0.224107
Nitrosospira lacus	9.392277	-1.94196	0.791086	-2.45481	0.014096	0.224107
Pandoraeva vervacti	189.6118	-1.31893	0.506748	-2.60273	0.009248	0.224107
Burkholderia sp. KJ006	98.77178	-4.88594	1.877846	-2.60189	0.009271	0.224107
Cupriavidus sp. USMAA1020	187.9861	-2.13754	0.822021	-2.60035	0.009313	0.224107
Hyphomonas sp. CACIAM 19H1	24.91596	-1.26436	0.482702	-2.61933	0.00881	0.224107

Bradyrhizobium sp. WSM471	150.0065	-1.89876	0.627978	-3.0236	0.002498	0.224107
Streptococcus intermedius	372.4424	-1.68417	0.618498	-2.723	0.006469	0.224107
Paraburkholderia terrae	654.2759	-1.44772	0.548045	-2.64162	0.008251	0.224107
Sutterella megalosphaeroides	45.37689	-1.51882	0.589492	-2.57649	0.009981	0.224107
Acidobacterium capsulatum	43.02372	-1.82708	0.65688	-2.78145	0.005412	0.224107
Rhodoferrax antarcticus	142.5333	-1.56055	0.517995	-3.01268	0.00259	0.224107
Helicobacter pylori	33.72427	1.696841	0.59081	2.872058	0.004078	0.224107
endosymbiont of unidentified scaly snail i	26.49894	-1.44324	0.571011	-2.52752	0.011487	0.224107
Orrella dioscoreae	162.2748	-1.32366	0.517369	-2.55845	0.010514	0.224107
Nitrosomonas sp. AL212	6.404686	-4.75388	1.867444	-2.54566	0.010907	0.224107
Slackia heliotrinireducens	51.92732	-1.70029	0.688874	-2.46822	0.013579	0.224107
Woeseia oceani	12.90025	-1.86035	0.724998	-2.56601	0.010287	0.224107
Mariprofundus ferrinatatus	5.946975	-3.51469	1.305787	-2.69163	0.00711	0.224107
Bacteroides vulgatus	397.4096	-1.87966	0.728031	-2.58184	0.009828	0.224107
Melaminivora sp. SC2-9	516.0593	-1.32113	0.55112	-2.39717	0.016522	0.224107
Pseudomonas chlororaphis	338.696	-1.00309	0.415335	-2.41514	0.015729	0.224107
Brachyspira pilosicoli	20.842	2.326842	0.970557	2.397431	0.016511	0.224107
Natrinema pellirubrum	7.834716	-3.32261	1.060789	-3.13221	0.001735	0.224107
Aeromonas hydrophila	123.4639	-0.86863	0.358348	-2.42399	0.015351	0.224107
Bordetella genomosp. 9	96.41652	-1.22769	0.511632	-2.39955	0.016415	0.224107
Bordetella genomosp. 8	104.5153	-1.44403	0.600323	-2.40542	0.016154	0.224107
Prevotella dentalis	149.1284	-1.4598	0.551596	-2.6465	0.008133	0.224107
Archangium gephyra	136.107	-1.19376	0.472275	-2.52768	0.011482	0.224107
Desulfovibrio desulfuricans	45.15192	-1.71739	0.567465	-3.02643	0.002475	0.224107
Pelobacter carbinolicus	15.69089	-2.2998	0.821469	-2.79962	0.005116	0.224107
Pseudomonas stutzeri	847.2532	-1.41218	0.565116	-2.49893	0.012457	0.224107
Herminiimonas arsenitoxidans	49.87558	-1.84671	0.693857	-2.66152	0.007779	0.224107
Bradyrhizobium sp. ORS 285	196.3878	-1.24212	0.46359	-2.67934	0.007377	0.224107
Niabella soli	48.947	-1.67647	0.700269	-2.39404	0.016664	0.224107
Ahniella affigens	23.62832	-1.88525	0.67058	-2.81138	0.004933	0.224107
Burkholderia insecticola	502.5472	-1.3348	0.539775	-2.47288	0.013403	0.224107
Xanthomonas albilineans	31.75394	-1.96188	0.685388	-2.86244	0.004204	0.224107
Achromobacter spanius	226.4706	-1.14245	0.471376	-2.42365	0.015366	0.224107
Halomonas subglaciescola	22.33265	-1.95182	0.777587	-2.5101	0.01207	0.224107
Phenyllobacterium zucineum	146.4734	-1.37966	0.568804	-2.42555	0.015285	0.224107
Micromonospora auratinigra	84.22571	-1.3853	0.529622	-2.61564	0.008906	0.224107
Bordetella holmesii	35.5238	-1.30479	0.545471	-2.39205	0.016755	0.224107
Paraburkholderia graminis	532.5381	-1.67755	0.659927	-2.54202	0.011021	0.224107
Pandoraea pnomenus	446.7082	-1.24602	0.521198	-2.39068	0.016817	0.224107
Fusobacterium varium	36.80244	1.481714	0.605508	2.447057	0.014403	0.224107
Dechloromonas sp. HYN0024	42.42003	-1.53742	0.64164	-2.39608	0.016572	0.224107
Rhodospirillum rubrum	53.35708	-1.1195	0.45301	-2.47126	0.013464	0.224107
Xanthomonas translucens	166.8761	-1.29164	0.521885	-2.47495	0.013325	0.224107
Sorangium cellulosum	637.7292	-1.32656	0.458445	-2.8936	0.003808	0.224107
Desulfovibrio magneticus	72.51278	-1.19232	0.455145	-2.61964	0.008802	0.224107
Azorhizobium caulinodans	100.8095	-1.05268	0.432306	-2.43504	0.01489	0.224107
Porphyrobacter neustonensis	37.32995	-1.32995	0.50939	-2.61087	0.009031	0.224107
Comamonas serinivorans	396.7172	-1.25979	0.472436	-2.66658	0.007663	0.224107
Thioalkalivibrio sulfidiphilus	55.95433	-1.49395	0.586243	-2.54835	0.010823	0.224107
Polaromonas sp. SP1	438.8968	-1.31916	0.469877	-2.80746	0.004993	0.224107

<i>Herbaspirillum rubrisubalbicans</i>	201.3295	-1.26339	0.521092	-2.4245	0.015329	0.224107
<i>Acidiphilium multivorum</i>	86.63542	-1.33157	0.554131	-2.40298	0.016262	0.224107
<i>Halogeometricum borinquense</i>	8.436522	-2.76068	1.018395	-2.71082	0.006712	0.224107
<i>Nitrobacter hamburgensis</i>	80.87217	-1.49163	0.591858	-2.52025	0.011727	0.224107
<i>Candidatus Desulforudis audaxviator</i>	18.9944	-2.61178	0.903583	-2.89047	0.003847	0.224107
<i>Delftia tsuruhatensis</i>	829.6257	-1.37195	0.514179	-2.66824	0.007625	0.224107
<i>Methylocystis rosea</i>	24.35252	-1.68523	0.699045	-2.41076	0.015919	0.224107
<i>Myxococcus xanthus</i>	75.79959	-1.69082	0.567727	-2.97822	0.002899	0.224107
<i>Arcobacter skirrowii</i>	7.069524	4.4064	1.829601	2.408394	0.016023	0.224107
<i>Syntrophobacter fumaroxidans</i>	17.13619	-2.03226	0.807045	-2.51815	0.011797	0.224107
<i>Azospirillum humicireducens</i>	84.75493	-1.51297	0.598628	-2.52739	0.011491	0.224107
<i>Oleiphilus messinensis</i>	4.508187	-2.87083	1.123869	-2.55441	0.010637	0.224107
<i>Pseudomonas kribbensis</i>	47.77939	-1.78843	0.666787	-2.68216	0.007315	0.224107
<i>Bradyrhizobium icense</i>	429.7313	-1.22208	0.482163	-2.53457	0.011258	0.224107
<i>Jeongeupia</i> sp. USM3	79.98897	-1.36299	0.494214	-2.75789	0.005818	0.224107
<i>Cupriavidus</i> sp. USMAHM13	236.8894	-1.97159	0.718969	-2.74225	0.006102	0.224107
<i>Gemmatirosa kalamazoonensis</i>	163.7385	-1.36637	0.48444	-2.82052	0.004795	0.224107
<i>Methylosinus trichosporium</i>	60.71884	-1.56304	0.575309	-2.71687	0.00659	0.224107
<i>Marinithermus hydrothermalis</i>	70.42035	-1.5657	0.599703	-2.61079	0.009033	0.224107
<i>Halomonas</i> sp. GFAJ-1	4.564052	-4.27952	1.412663	-3.0294	0.00245	0.224107
<i>Chitinophaga caeni</i>	28.96834	-1.59452	0.652784	-2.44264	0.01458	0.224107
<i>Micromonospora siamensis</i>	79.3109	-0.86514	0.352791	-2.45226	0.014196	0.224107
<i>Parvularcula bermudensis</i>	6.484869	-3.39807	1.124593	-3.0216	0.002514	0.224107
<i>Azoarcus</i> sp. SY39	83.27145	-1.55247	0.595077	-2.60885	0.009085	0.224107
<i>Staphylococcus cohnii</i>	249.362	1.284491	0.422405	3.040897	0.002359	0.224107
<i>Bacterioplanes sanyensis</i>	6.195225	-2.74714	0.878245	-3.12799	0.00176	0.224107
<i>Chlorobaculum parvum</i>	17.8517	-2.34173	0.846231	-2.76724	0.005653	0.224107
<i>Janthinobacterium agaricidamnosum</i>	438.6492	-1.2803	0.515382	-2.48418	0.012985	0.224107
<i>Burkholderiales bacterium</i> GJ-E10	67.29262	-1.48825	0.593576	-2.50725	0.012167	0.224107
<i>Neisseria weaveri</i>	24.74321	-2.62728	0.882592	-2.97678	0.002913	0.224107
<i>Maricaulis maris</i>	23.46205	-1.34985	0.521412	-2.58883	0.00963	0.224107
<i>Acidovorax</i> sp. RAC01	487.1373	-1.29363	0.511601	-2.5286	0.011452	0.224107
<i>Marinobacter similis</i>	14.32679	-2.38013	0.9278	-2.56534	0.010307	0.224107
<i>Burkholderia</i> sp. BDU6	126.748	-1.32757	0.538666	-2.46456	0.013718	0.224107
<i>Rhizobium jaguaris</i>	40.16336	-1.48309	0.546128	-2.71564	0.006615	0.224107
<i>Burkholderia pseudomultivorans</i>	188.1704	-1.65616	0.686042	-2.41408	0.015775	0.224107
<i>Thauera chlorobenzoica</i>	78.59065	-1.71984	0.593047	-2.90001	0.003732	0.224107
<i>Simiduia agarivorans</i>	15.19922	-2.42	0.961517	-2.51686	0.011841	0.224107
<i>Streptomyces pristinaespiralis</i>	69.65923	-1.09304	0.434584	-2.51514	0.011899	0.224107
<i>Verrucomicrobium spinosum</i>	31.869	-1.46103	0.566955	-2.57698	0.009967	0.224107
<i>Pelobacter</i> sp. SFB93	14.12244	-2.84269	1.039356	-2.73505	0.006237	0.224107
<i>Dickeya chrysanthemi</i>	28.85487	-1.43556	0.535499	-2.68078	0.007345	0.224107
<i>Rhizobium gallicum</i>	62.63379	-1.43613	0.550383	-2.60933	0.009072	0.224107
<i>Cupriavidus</i> sp. USMAA2-4	2029.833	-1.39277	0.568388	-2.45039	0.01427	0.224107
<i>Mesorhizobium loti</i>	183.6498	-1.32935	0.518541	-2.56363	0.010358	0.224107
<i>Nitrosomonas</i> sp. Is79A3	33.05872	-2.39035	0.77261	-3.09386	0.001976	0.224107
<i>Phyllobacterium zundukense</i>	23.16216	-1.33657	0.532479	-2.51009	0.01207	0.224107
<i>Indioceanicola profundus</i>	73.66827	-1.11814	0.458231	-2.44013	0.014682	0.224107
<i>Opitutaceae bacterium</i> TAV5	40.10312	-1.36172	0.566204	-2.40501	0.016172	0.224107
<i>Deinococcus</i> sp. NW-56	85.56665	-1.38366	0.531384	-2.60388	0.009218	0.224107

<i>Geobacter sulfurreducens</i>	76.2734	-1.82333	0.665596	-2.73939	0.006155	0.224107
<i>Methyloceanibacter caenitepidi</i>	22.46993	-1.89035	0.70307	-2.68871	0.007173	0.224107
<i>Staphylococcus haemolyticus</i>	4919.519	1.457589	0.530547	2.747332	0.006008	0.224107
<i>Burkholderia lata</i>	577.8981	-1.39597	0.527508	-2.64636	0.008136	0.224107
<i>Paenibacillus lentus</i>	7.812336	-2.21595	0.901335	-2.45852	0.013951	0.224107
<i>Thauera</i> sp. K11	293.593	-1.1812	0.433526	-2.72463	0.006437	0.224107
<i>Magnetospirillum</i> sp. ME-1	44.50726	-1.2813	0.525219	-2.43955	0.014705	0.224107
<i>Cronobacter malonaticus</i>	4.97188	-4.39142	1.758181	-2.4977	0.0125	0.224107
<i>Methyloversatilis</i> sp. RAC08	87.97234	-1.19927	0.476416	-2.51728	0.011827	0.224107
<i>Methylocaldum marinum</i>	59.82499	-1.34861	0.517673	-2.60514	0.009184	0.224107
<i>Bradyrhizobium</i> sp. 3 85S1MB	206.669	-1.38265	0.527965	-2.61883	0.008823	0.224107
<i>Amycolatopsis mediterranei</i>	147.3114	-0.88874	0.36888	-2.40929	0.015984	0.224107
<i>Variibacter gotjawalensis</i>	64.95354	-1.38785	0.546641	-2.53887	0.011121	0.224107
<i>Bacillus thuringiensis</i>	414.6642	1.775574	0.619063	2.868164	0.004129	0.224107
<i>Bosea</i> sp. RAC05	195.4117	-1.13149	0.471723	-2.39863	0.016457	0.224107
<i>Variovorax</i> sp. PMC12	762.0929	-1.24018	0.514472	-2.41058	0.015927	0.224107
<i>Herbaspirillum hiltneri</i>	188.5284	-1.28189	0.48406	-2.6482	0.008092	0.224107
<i>Vogesella</i> sp. LIG4	93.10032	-1.30919	0.484237	-2.70361	0.006859	0.224107
<i>Methanobrevibacter millerae</i>	4.696609	4.764426	1.981056	2.404993	0.016173	0.224107
<i>Bdellovibrio bacteriovorus</i>	17.64614	-1.74586	0.61167	-2.85425	0.004314	0.224107
<i>Mesorhizobium australicum</i>	106.4554	-1.26956	0.447034	-2.83997	0.004512	0.224107
<i>Xanthomonas citri</i>	157.19	-1.44687	0.564516	-2.56303	0.010376	0.224107
<i>Ralstonia insidiosa</i>	33222.26	-1.23272	0.508708	-2.42323	0.015383	0.224107
<i>Clostridium kluyveri</i>	50.31057	1.661903	0.695702	2.388815	0.016903	0.224425
<i>Rubinisphaera brasiliensis</i>	11.92803	-2.04237	0.857874	-2.38073	0.017278	0.224912
<i>Stenotrophomonas</i> sp. ZAC14D2_NAIMI4	23.89994	-2.76176	1.15777	-2.38541	0.01706	0.224912
<i>Bradyrhizobium erythrophlei</i>	783.5728	-1.11107	0.465908	-2.38475	0.017091	0.224912
<i>Spiroplasma diminutum</i>	5.275995	5.890991	2.473138	2.381991	0.017219	0.224912
<i>Comamonas kerstersii</i>	137.8465	-1.06956	0.449386	-2.38005	0.01731	0.224912
<i>Candidatus Accumulibacter phosphatis</i>	96.31982	-1.23112	0.517229	-2.38023	0.017302	0.224912
<i>Granulicella tundricola</i>	38.19342	-1.38751	0.585048	-2.37161	0.017711	0.226074
<i>Rhizobacter gummiphilus</i>	621.0577	-1.20258	0.507042	-2.37175	0.017704	0.226074
<i>Laribacter hongkongensis</i>	70.8138	-1.08995	0.459271	-2.37323	0.017633	0.226074
<i>Haloplanus aerogenes</i>	23.00241	-2.19257	0.92295	-2.37562	0.01752	0.226074
<i>Chondromyces crocatus</i>	153.5447	-1.18553	0.499346	-2.37417	0.017589	0.226074
<i>Lysobacter</i> sp. TY2-98	96.12876	-1.38807	0.586589	-2.36634	0.017965	0.228274
<i>Methylobacterium</i> sp. DM1	104.4969	-0.84169	0.355982	-2.36442	0.018058	0.228274
<i>Variovorax</i> sp. PAMC 28711	462.6963	-1.30256	0.550961	-2.36416	0.018071	0.228274
<i>Halomonas</i> sp. SF2003	33.60731	-1.57068	0.665911	-2.35869	0.018339	0.23086
<i>Methylobacterium nodulans</i>	172.8149	-1.00222	0.426611	-2.34925	0.018811	0.232773
<i>Cupriavidus basilensis</i>	897.989	-1.24937	0.531766	-2.34947	0.0188	0.232773
<i>Komagataeibacter saccharivorans</i>	16.33488	-2.19588	0.934468	-2.34987	0.01878	0.232773
<i>Pseudorhodoplanes sinuspersici</i>	78.44344	-1.16091	0.493894	-2.35051	0.018748	0.232773
<i>Streptomyces</i> sp. CdTB01	96.34725	-1.01833	0.433362	-2.34984	0.018782	0.232773
<i>Paucimonas lemoignei</i>	35.49579	-1.3408	0.571944	-2.34429	0.019063	0.232992
<i>Thermaerobacter marianensis</i>	72.52865	-1.04581	0.44956	-2.3263	0.020003	0.232992
<i>Granulibacter bethesdensis</i>	54.16926	-0.99993	0.431092	-2.31954	0.020366	0.232992
<i>Streptomyces</i> sp. Sge12	36.40445	-2.03698	0.871207	-2.33811	0.019381	0.232992
<i>Sphingobium yanoikuyae</i>	435.8642	-1.29051	0.556262	-2.31997	0.020342	0.232992
<i>Geobacter anodireducens</i>	14.38141	-2.03191	0.875356	-2.32124	0.020274	0.232992

Deinococcus irradiatisoli	60.7301	-1.19167	0.512503	-2.32519	0.020062	0.232992
Bordetella sp. H567	108.8432	-1.07939	0.461058	-2.34111	0.019226	0.232992
Serpentinomonas raichei	154.7881	-1.24658	0.53203	-2.34306	0.019126	0.232992
Rubrivivax gelatinosus	871.2325	-1.18213	0.507044	-2.33141	0.019732	0.232992
Burkholderia stagnalis	446.8427	-1.31537	0.565799	-2.32481	0.020082	0.232992
Acidiferrobacter sp. SPIII_3	34.02806	-1.32461	0.565953	-2.34049	0.019258	0.232992
Bradyrhizobium sp. CCGE-LA001	295.8029	-1.27743	0.550056	-2.32237	0.020213	0.232992
Xylella fastidiosa	18.7334	-1.94482	0.834612	-2.33021	0.019795	0.232992
Melaminivora sp. SC2-7	419.4541	-1.24962	0.538491	-2.32059	0.020309	0.232992
Halomonas aestuarii	33.73793	-1.44066	0.617283	-2.33388	0.019602	0.232992
Methanoculleus marisnigri	13.11792	-2.26314	0.965984	-2.34283	0.019138	0.232992
Prosthecochloris sp. GSB1	10.10415	-2.36557	1.018671	-2.32222	0.020221	0.232992
Burkholderia sp. LA-2-3-30-S1-D2	110.4239	-1.31453	0.564549	-2.32847	0.019887	0.232992
Acidithiobacillus ferrooxidans	11.40067	-2.2369	0.962021	-2.3252	0.020061	0.232992
Myxococcus stipitatus	81.97943	-1.27126	0.547876	-2.32034	0.020322	0.232992
Herbaspirillum robiniae	305.8289	-1.14636	0.490969	-2.33489	0.019549	0.232992
Paraburkholderia caledonica	800.7273	-1.23945	0.528142	-2.34682	0.018934	0.232992
Clostridium butyricum	46.93886	1.584486	0.680148	2.329619	0.019826	0.232992
Burkholderia latens	88.83024	-1.80098	0.777274	-2.31705	0.020501	0.233801
Nitrosospira briensis	5.201434	-2.81934	1.218312	-2.31414	0.02066	0.234881
Sulfuricaulis limicola	38.43135	-1.3036	0.563925	-2.31166	0.020796	0.235692
Streptomyces sp. fd1-xmd	85.87167	-1.12869	0.488508	-2.31048	0.020861	0.235696
Symbiobacterium thermophilum	77.43769	-1.31646	0.573	-2.29748	0.021591	0.236593
Hydrogenophaga crassostreae	263.6987	-1.19724	0.520368	-2.30075	0.021406	0.236593
Ensifer sojae	51.76777	-1.51158	0.655449	-2.30618	0.0211	0.236593
Klebsiella quasipneumoniae	25.43974	-2.91458	1.267451	-2.29956	0.021473	0.236593
Cupriavidus pinatubonensis	574.3504	-1.10597	0.480747	-2.30052	0.021419	0.236593
Roseateles depolymerans	710.6567	-1.13229	0.491575	-2.3034	0.021257	0.236593
Paenibacillus sp. RUD330	47.89124	-1.43781	0.624474	-2.30244	0.02131	0.236593
Acidovorax cattleyae	299.9727	-1.27568	0.554985	-2.29859	0.021528	0.236593
Burkholderia cepacia	1564.457	-1.21456	0.526572	-2.30654	0.021081	0.236593
Burkholderia sp. OLGA172	2194.81	-1.22233	0.531869	-2.29817	0.021552	0.236593
Terriglobus roseus	90.31632	-1.07805	0.469736	-2.29501	0.021733	0.23676
Staphylococcus kloosii	108.9481	1.365803	0.595137	2.294939	0.021737	0.23676
Halobiforma lacisalsi	13.25768	-1.57771	0.6892	-2.28919	0.022068	0.237317
Candidatus Solibacter usitatus	71.19586	-1.14041	0.497453	-2.2925	0.021877	0.237317
Frankia casuarinae	44.68926	-1.15172	0.503531	-2.28728	0.022179	0.237317
Desulfurivibrio alkaliphilus	16.59006	-1.86174	0.813041	-2.28985	0.02203	0.237317
Bradyrhizobium japonicum	549.6361	-1.17861	0.514959	-2.28876	0.022094	0.237317
Meiothermus ruber	41.33344	-1.28701	0.562551	-2.28782	0.022148	0.237317
Aeromonas sp. CA23	22.28956	-1.62651	0.7116	-2.2857	0.022272	0.237608
Streptomyces sp. CMB-StM0423	73.59359	-1.33417	0.584744	-2.28163	0.022511	0.238765
Paraburkholderia caffeinilytica	1377.635	-1.24186	0.544128	-2.28229	0.022472	0.238765
Massilia oculi	533.3084	-1.16914	0.514383	-2.27291	0.023032	0.239585
Stenotrophomonas sp. SAU14A_NAIMI4_	99.71287	-1.34857	0.594392	-2.26883	0.023279	0.239585
Marinobacterium aestuarii	31.25115	-1.38244	0.608602	-2.2715	0.023117	0.239585
Allochromatium vinosum	52.98542	-1.14536	0.503644	-2.27414	0.022957	0.239585
[Pseudomonas] mesoacidophila	357.2816	-1.26474	0.557728	-2.26766	0.02335	0.239585
Tsukamurella tyrosinosolvens	307.1934	-0.91519	0.401594	-2.27889	0.022674	0.239585
Paraburkholderia sp. SOS3	874.5797	-1.2631	0.555997	-2.27177	0.0231	0.239585

<i>Pseudomonas xinjiangensis</i>	21.13632	-1.2856	0.567747	-2.26439	0.02355	0.239585
<i>Spiroplasma corruscae</i>	5.711168	4.780918	2.108112	2.267867	0.023337	0.239585
<i>Marinobacter</i> sp. LQ44	14.75328	-1.60926	0.707838	-2.27348	0.022997	0.239585
<i>Rhodoferax ferrireducens</i>	231.7414	-1.20928	0.534223	-2.26363	0.023597	0.239585
<i>Methylocystis</i> sp. SC2	26.37976	-1.49001	0.65625	-2.2705	0.023178	0.239585
<i>Pseudomonas</i> sp. K2W31S-8	74.08487	-1.12873	0.49879	-2.26294	0.02364	0.239585
<i>Hydrogenophaga</i> sp. RAC07	526.5734	-1.10743	0.488655	-2.26629	0.023434	0.239585
<i>Vulgatibacter incomptus</i>	90.14097	-1.30891	0.576346	-2.27105	0.023144	0.239585
<i>Pseudomonas</i> sp. M30-35	15.47337	-1.44249	0.637452	-2.26289	0.023642	0.239585
<i>Hyphomonas</i> sp. Mor2	18.05355	-1.94731	0.861536	-2.26028	0.023804	0.240552
<i>Enterococcus casseliflavus</i>	12.14678	-3.17392	1.404884	-2.2592	0.023871	0.240558
<i>Rhizobium favelukesii</i>	58.81716	-1.43934	0.637576	-2.25752	0.023976	0.240583
<i>Pandoraea oxalativorans</i>	155.5193	-1.30487	0.578368	-2.25612	0.024063	0.240583
<i>Klebsiella michiganensis</i>	44.69368	-1.67511	0.742516	-2.25599	0.024072	0.240583
<i>Myxococcus hansupus</i>	80.66715	-1.22504	0.543725	-2.25305	0.024256	0.24176
<i>Rhodospirillum centenum</i>	85.30798	-1.17442	0.522906	-2.24595	0.024707	0.242329
<i>Bradyrhizobium oligotrophicum</i>	206.9574	-1.10683	0.494191	-2.23967	0.025112	0.242329
<i>Pandoraea norimbergensis</i>	211.0258	-1.19945	0.533008	-2.25035	0.024427	0.242329
<i>Vibrio tritonius</i>	5.19791	-3.40968	1.515403	-2.25002	0.024448	0.242329
<i>Dyadobacter fermentans</i>	40.4326	-1.28949	0.575457	-2.24081	0.025038	0.242329
<i>Phycisphaera mikurensis</i>	54.93778	-1.27025	0.567127	-2.2398	0.025104	0.242329
<i>Bosea</i> sp. PAMC 26642	122.0971	-1.08817	0.485211	-2.24268	0.024917	0.242329
<i>Acidovorax avenae</i>	1097.524	-1.21913	0.543554	-2.24289	0.024904	0.242329
<i>Magnetospira</i> sp. QH-2	21.09579	-1.3033	0.580594	-2.24476	0.024783	0.242329
<i>Streptomyces niveus</i>	140.423	-1.0495	0.467935	-2.24284	0.024907	0.242329
<i>Nitrospira japonica</i>	24.43184	-1.45816	0.650293	-2.24231	0.024941	0.242329
<i>Pseudomonas</i> sp. MT-1	24.19147	-1.73731	0.772957	-2.24761	0.024601	0.242329
<i>Halanaeroarchaeum sulfurireducens</i>	7.095579	-2.48863	1.11694	-2.22808	0.025875	0.242525
<i>Streptomyces albireticuli</i>	99.78524	-0.9066	0.407004	-2.2275	0.025914	0.242525
<i>Alicyclophilus denitrificans</i>	1448.434	-1.12859	0.506088	-2.23002	0.025746	0.242525
<i>Blastochloris viridis</i>	78.974	-1.26607	0.568109	-2.22857	0.025842	0.242525
<i>Bordetella petrii</i>	189.785	-1.19933	0.537923	-2.22956	0.025776	0.242525
<i>Synechococcus</i> sp. KORDI-52	12.54499	-2.54378	1.138119	-2.23508	0.025412	0.242525
<i>Microbulbifer thermotolerans</i>	9.885095	-1.70611	0.766369	-2.22623	0.025999	0.242525
<i>Devosia</i> sp. I507	41.15662	-1.49291	0.667725	-2.23582	0.025364	0.242525
<i>Cupriavidus metallidurans</i>	1000.754	-1.22613	0.550386	-2.22776	0.025897	0.242525
<i>Gordonibacter urolithinifaciens</i>	41.72742	-1.97219	0.885534	-2.22712	0.025939	0.242525
<i>Massilia violaceinigra</i>	210.1204	-1.04978	0.470092	-2.23313	0.02554	0.242525
<i>Ketobacter alkanivorans</i>	6.661748	-2.75133	1.233612	-2.2303	0.025727	0.242525
<i>Nocardiopsis alba</i>	91.43715	-0.83066	0.371488	-2.23604	0.025349	0.242525
<i>Burkholderia</i> sp. CCGE1002	972.6326	-1.19465	0.537092	-2.22429	0.026129	0.242675
<i>Bradyrhizobium</i> sp. 2 39S1MB	208.015	-1.21414	0.545927	-2.224	0.026149	0.242675
<i>Dyella jiangningensis</i>	93.41765	-1.12951	0.509639	-2.2163	0.026671	0.244426
<i>Pseudomonas</i> sp. S-6-2	23.97187	-1.40258	0.632561	-2.2173	0.026603	0.244426
<i>Pseudomonas citronellolis</i>	182.1741	-0.93943	0.423662	-2.2174	0.026596	0.244426
<i>Gordonia terrae</i>	436.3728	-1.11727	0.504122	-2.21627	0.026673	0.244426
<i>Streptomyces bingchenggensis</i>	116.095	-1.00633	0.453308	-2.21997	0.026421	0.244426
<i>Burkholderia pyrrocinia</i>	481.0565	-1.20861	0.546331	-2.21223	0.026951	0.246333
<i>Nonlabens spongiae</i>	10.69074	-2.02281	0.91558	-2.20932	0.027152	0.246333
<i>Acidisphaera</i> sp. G45-3	67.0041	-1.17183	0.530392	-2.20937	0.027149	0.246333

<i>Thioflavicoccus mobilis</i>	37.54092	-1.10099	0.498115	-2.21031	0.027084	0.246333
<i>Streptomyces</i> sp. TLI_053	87.57887	-0.88435	0.401858	-2.20064	0.027761	0.246701
<i>Tistrella mobilis</i>	134.711	-1.14883	0.52186	-2.20142	0.027706	0.246701
<i>Dokdonella koreensis</i>	219.7922	-1.16767	0.530101	-2.20272	0.027614	0.246701
<i>Gemmata obscuriglobus</i>	75.78514	-1.21359	0.551619	-2.20005	0.027803	0.246701
<i>Blastomonas fulva</i>	39.21137	-1.95123	0.886226	-2.20173	0.027684	0.246701
<i>Streptomyces dengpaensis</i>	63.04067	-1.2203	0.554573	-2.20043	0.027776	0.246701
<i>Sulfuricella denitrificans</i>	41.01978	-1.17549	0.532942	-2.20567	0.027407	0.246701
<i>Nitratireductor</i> sp. OM-1	42.24016	-1.31061	0.594679	-2.2039	0.027532	0.246701
<i>Croceicoccus marinus</i>	66.26358	-0.91335	0.414325	-2.20442	0.027495	0.246701
<i>Streptomyces griseus</i>	69.89716	-1.22776	0.558864	-2.19689	0.028029	0.246895
<i>Planococcus</i> sp. PAMC 21323	12.03255	-2.42712	1.104045	-2.19839	0.027921	0.246895
<i>Verminephrobacter eiseniae</i>	465.1445	-1.21779	0.554155	-2.19757	0.02798	0.246895
<i>Dyella japonica</i>	135.6773	-1.05422	0.480465	-2.19417	0.028223	0.248007
<i>Bordetella avium</i>	51.6194	-1.24194	0.5726	-2.16895	0.030086	0.248373
<i>Bernardetia litoralis</i>	21.95266	1.566264	0.715366	2.189458	0.028564	0.248373
<i>Burkholderia diffusa</i>	151.225	-1.34592	0.617978	-2.17793	0.029411	0.248373
<i>Pseudomonas</i> sp. UW4	42.78683	-1.27938	0.590266	-2.16746	0.0302	0.248373
<i>Sandaracinus amylolyticus</i>	185.9754	-0.98845	0.452377	-2.185	0.028889	0.248373
<i>Niastella koreensis</i>	143.4488	-1.16721	0.537974	-2.16964	0.030034	0.248373
<i>Paraburkholderia rhizoxinica</i>	117.8144	-1.31423	0.606006	-2.16868	0.030107	0.248373
<i>Streptomyces spongiicola</i>	46.89278	-1.04635	0.482209	-2.16992	0.030013	0.248373
<i>Cupriavidus oxalaticus</i>	424.9388	-1.10101	0.511215	-2.15371	0.031263	0.248373
<i>Paraburkholderia fungorum</i>	4549.335	-1.24901	0.576378	-2.16699	0.030235	0.248373
<i>Pandoraea apista</i>	178.8738	-1.03159	0.476535	-2.16478	0.030405	0.248373
<i>Streptomyces</i> sp. Z022	67.47411	-1.12736	0.517278	-2.17941	0.029301	0.248373
<i>Methylorubrum extorquens</i>	343.5458	-0.77228	0.357477	-2.16037	0.030744	0.248373
<i>Azospirillum</i> sp. TSH58	103.3218	-1.22883	0.56722	-2.16641	0.03028	0.248373
<i>gamma proteobacterium HdN1</i>	17.6127	-1.45699	0.670084	-2.17433	0.02968	0.248373
<i>Pseudomonas</i> sp. CC6-YY-74	35.6421	-1.22532	0.560316	-2.18683	0.028755	0.248373
<i>Erwinia amylovora</i>	14.34065	-2.46362	1.142334	-2.15665	0.031033	0.248373
<i>Pseudomonas cedrina</i>	60.01945	-1.21958	0.562973	-2.16632	0.030287	0.248373
<i>Leadbetterella byssohila</i>	8.055948	-1.98305	0.917215	-2.16203	0.030616	0.248373
<i>Variovorax paradoxus</i>	2106.268	-1.04554	0.482192	-2.16831	0.030135	0.248373
<i>Halomonas elongata</i>	35.71908	-1.10958	0.509105	-2.17948	0.029296	0.248373
<i>Thiomonas</i> sp. X19	160.2465	-1.23702	0.566892	-2.18211	0.029101	0.248373
<i>Cupriavidus taiwanensis</i>	2603.095	-1.08899	0.50141	-2.17186	0.029866	0.248373
<i>Ferriphaselus amnicola</i>	37.64612	-1.2402	0.576295	-2.15203	0.031395	0.248373
<i>Advenella mimigardefordensis</i>	23.06026	-1.36586	0.62503	-2.18527	0.028869	0.248373
<i>Rhizobium</i> sp. N324	6.373504	-4.74088	2.193685	-2.16115	0.030684	0.248373
<i>Sodalis glossinidius</i>	9.284885	-2.02617	0.934405	-2.1684	0.030128	0.248373
<i>Rubrobacter indicoceani</i>	28.49722	-1.444	0.67004	-2.1551	0.031154	0.248373
<i>Xanthomonas vesicatoria</i>	40.09968	-1.24481	0.578518	-2.15172	0.031419	0.248373
<i>Streptomyces glaucescens</i>	59.26876	-1.01521	0.465848	-2.17927	0.029311	0.248373
<i>Burkholderiales bacterium JOSHI_001</i>	600.4974	-1.12382	0.514688	-2.18349	0.029	0.248373
<i>Rhodoplanes</i> sp. Z2-YC6860	154.9823	-1.0834	0.503667	-2.15104	0.031473	0.248373
<i>Methylomonas methanica</i>	9.014651	-2.58469	1.19709	-2.15914	0.030839	0.248373
<i>Neisseria meningitidis</i>	391.6516	-1.40355	0.645769	-2.17345	0.029746	0.248373
<i>Mycolicibacterium vaccae</i>	233.6023	-0.92557	0.428444	-2.16032	0.030748	0.248373
<i>Azoarcus</i> sp. CIB	95.69597	-1.27717	0.58459	-2.18473	0.028909	0.248373

Serratia sp. FDAARGOS_506	8.568819	-3.1663	1.471799	-2.15131	0.031452	0.248373
Burkholderia gladioli	1190.44	-1.11451	0.515339	-2.16268	0.030566	0.248373
Paraburkholderia aromaticivorans	1466.675	-1.23147	0.570974	-2.15679	0.031022	0.248373
Azospirillum brasilense	277.4623	-1.19477	0.546621	-2.18574	0.028834	0.248373
Fuerstia marisgermanicae	14.63039	-1.71304	0.787774	-2.17453	0.029665	0.248373
Herbaspirillum sp. meg3	115.2404	-1.2827	0.585587	-2.19046	0.028491	0.248373
Vitreoscilla filiformis	129.9431	-1.02594	0.471858	-2.17426	0.029686	0.248373
Moorella thermoacetica	23.60817	-1.38047	0.639682	-2.15805	0.030924	0.248373
Pandoraea sputorum	146.668	-1.30517	0.605452	-2.1557	0.031107	0.248373
Roseomonas gilardii	238.8228	-1.07275	0.49691	-2.15884	0.030862	0.248373
Arachidococcus sp. KIS59-12	52.25703	-1.29089	0.595216	-2.16877	0.0301	0.248373
Brachyspira intermedia	13.03855	2.796356	1.300811	2.149702	0.031579	0.248666
Acidovorax carolinensis	853.8768	-1.14607	0.533377	-2.14871	0.031657	0.248745
Chitinophaga sp. MD30	38.20064	-1.26649	0.590186	-2.14592	0.031879	0.249914
Pseudomonas brenneri	35.00039	-1.2776	0.595585	-2.14512	0.031943	0.249914
Paraburkholderia terricola	1130.043	-1.1584	0.541127	-2.14072	0.032297	0.252137
Gloeobacter violaceus	73.23767	-1.09908	0.513935	-2.13856	0.032471	0.252956
Paraburkholderia xenovorans	1544.167	-1.10216	0.515938	-2.13622	0.032661	0.253891
Variovorax sp. HW608	797.1237	-1.08644	0.509085	-2.13409	0.032835	0.2547
Pseudonocardia sp. HH130629-09	214.1094	-0.9408	0.441236	-2.13219	0.032991	0.255366
Paraburkholderia caribensis	1401.834	-1.08925	0.511686	-2.12876	0.033274	0.255924
Streptomyces roseochromogenus	61.01683	-0.96029	0.450901	-2.12971	0.033196	0.255924
Kushneria konosiri	25.63598	-1.20988	0.568267	-2.12907	0.033248	0.255924
Gluconacetobacter diazotrophicus	77.53252	-1.08639	0.510622	-2.12758	0.033372	0.256131
Burkholderia ambifaria	348.3791	-1.19163	0.566117	-2.10491	0.035299	0.256664
Geobacter sp. DSM 9736	15.80801	-1.7519	0.837857	-2.09093	0.036535	0.256664
Marichromatium purpuratum	60.2027	-0.95185	0.453915	-2.09699	0.035994	0.256664
Pseudomonas sp. LTJR-52	38.39712	-1.31777	0.627218	-2.10098	0.035643	0.256664
Pelodictyon luteolum	11.02988	-1.79246	0.853685	-2.09967	0.035758	0.256664
Streptomyces sp. S8	36.3146	-1.62796	0.770493	-2.11289	0.03461	0.256664
Porphyrobacter sp. CACIAM 03H1	51.50547	-1.09245	0.521932	-2.09309	0.036341	0.256664
Burkholderia sp. CCGE1003	772.0867	-1.19909	0.571861	-2.09683	0.036009	0.256664
Oxalobacter formigenes	10.61485	-1.84959	0.879591	-2.10278	0.035485	0.256664
Paraburkholderia phymatum	901.7631	-1.15791	0.553752	-2.09103	0.036526	0.256664
Methanosaeta harundinacea	4.132015	-3.3237	1.569891	-2.11715	0.034247	0.256664
Bradyrhizobium sp.	277.4079	-1.10869	0.530468	-2.09002	0.036616	0.256664
Mycobacterium shigaense	104.7886	-0.87249	0.417145	-2.09158	0.036476	0.256664
Pseudomonas furukawaii	72.36021	-1.04603	0.495711	-2.11016	0.034845	0.256664
Halomonas beimenensis	93.39009	-1.18472	0.560028	-2.11547	0.03439	0.256664
Agrobacterium rhizogenes	47.52579	-1.29887	0.620136	-2.09449	0.036216	0.256664
Actinoplanes friuliensis	158.9773	-0.93911	0.442141	-2.12401	0.033669	0.256664
Epibacterium mobile	19.94595	-1.33276	0.633078	-2.10521	0.035273	0.256664
Serratia rubidaea	22.38736	-2.09034	0.988404	-2.11486	0.034442	0.256664
Elizabethkingia miricola	5.940043	-3.6775	1.759157	-2.09049	0.036574	0.256664
Tsukamurella paurometabola	155.3346	-0.84925	0.402203	-2.11149	0.03473	0.256664
Methylobacillus flagellatus	15.0711	-1.48653	0.707903	-2.09991	0.035737	0.256664
Sinorhizobium medicae	35.97563	-1.36194	0.642506	-2.11974	0.034028	0.256664
Desulfovibrio sp. FW1012B	40.93835	-1.18093	0.558549	-2.11429	0.034491	0.256664
Frankineae bacterium MT45	70.63188	-0.89217	0.421603	-2.11613	0.034334	0.256664
Serratia proteamaculans	112.381	1.755514	0.837136	2.097048	0.035989	0.256664

Pseudonocardia sp. AL041005-10	262.2201	-0.78314	0.37061	-2.11312	0.03459	0.256664
Pseudomonas sp. DY-1	58.18207	-1.37001	0.645705	-2.12172	0.033861	0.256664
Rhodopseudomonas palustris	1054.245	-0.92524	0.441538	-2.09548	0.036128	0.256664
Staphylococcus virus Sextaec	359.2255	3.76312	1.778589	2.11579	0.034363	0.256664
[Polyangium] brachysporum	409.9923	-1.14573	0.545818	-2.0991	0.035808	0.256664
Methanosarcina barkeri	19.82844	2.456867	1.167205	2.104915	0.035299	0.256664
Dyella thiooxydans	165.4473	-1.06406	0.50868	-2.0918	0.036456	0.256664
Microbulbifer sp. A4B17	9.624404	-1.62413	0.771777	-2.1044	0.035343	0.256664
Cyanobium gracile	53.7494	-1.03436	0.493412	-2.09634	0.036052	0.256664
Mycobacterium paragordonae	197.0944	-0.80964	0.386046	-2.09728	0.035969	0.256664
Polaromonas sp. JS666	492.9448	-1.15581	0.544734	-2.12178	0.033856	0.256664
Ottowia sp. oral taxon 894	115.2138	-1.10955	0.524854	-2.11403	0.034513	0.256664
Conexibacter woesei	198.5958	-0.98208	0.467733	-2.09967	0.035758	0.256664
Streptomyces albus	92.07557	-0.86344	0.411674	-2.09739	0.035959	0.256664
Azoarcus sp. BH72	58.29702	-2.05565	0.971184	-2.11665	0.03429	0.256664
Nocardiopsis dassonvillei	173.9457	-0.8539	0.405848	-2.104	0.035379	0.256664
Burkholderia sp. YI23	227.8715	-1.27262	0.60769	-2.09419	0.036243	0.256664
Prochlorococcus marinus	67.67244	0.954356	0.451735	2.112649	0.034631	0.256664
Streptomyces pratensis	20.74386	-2.97862	1.418086	-2.10045	0.035689	0.256664
Mitsuaria sp. 7	1151.459	-1.03448	0.496048	-2.08545	0.037028	0.257176
Mycobacterium sp. EPa45	127.5897	-1.01604	0.487025	-2.08621	0.036959	0.257176
Simplicispira suum	391.6697	-1.02375	0.490253	-2.08821	0.036778	0.257176
Breoghanian sp. L-A4	58.51215	-1.3225	0.634204	-2.0853	0.037042	0.257176
Bacillus glycinifermentans	13.21588	-1.95583	0.937893	-2.08535	0.037038	0.257176
Pseudogulbenkiania sp. NH8B	104.4173	-1.01154	0.485482	-2.08358	0.037198	0.257766
Burkholderia sp. PAMC 26561	351.3319	-1.21689	0.58444	-2.08214	0.037329	0.258182
Yangia pacifica	75.54985	-1.00536	0.483407	-2.07974	0.037549	0.25921
Curvibacter sp. AEP1-3	192.9235	-1.08324	0.521353	-2.07775	0.037733	0.259493
Filimonas lacunae	97.39296	-1.107	0.532757	-2.07788	0.037721	0.259493
Citrobacter amalonaticus	28.90698	-2.33878	1.126606	-2.07595	0.037898	0.25965
Massilia sp. NR 4-1	219.5538	-0.96379	0.464184	-2.0763	0.037866	0.25965
Rhodoferax koreense	928.1802	-1.12224	0.541048	-2.0742	0.038061	0.260275
Cedecea neteri	47.05562	-1.07903	0.521237	-2.07013	0.03844	0.260705
Martelella mediterranea	67.62622	-1.18819	0.57387	-2.07048	0.038408	0.260705
Burkholderia sp. BDU8	133.055	-1.3215	0.638506	-2.06968	0.038482	0.260705
Sinorhizobium americanum	34.15315	-1.25356	0.605062	-2.07179	0.038285	0.260705
Xanthomonas arboricola	31.93614	-1.37089	0.662014	-2.07078	0.038379	0.260705
Sulfolobus islandicus	5.833522	4.413886	2.133882	2.068477	0.038595	0.260784
Methylomonas koyamae	4.602243	-3.19111	1.543635	-2.06727	0.038709	0.260784
Rhodococcus sp. PBTS 2	383.4314	1.321351	0.639138	2.067396	0.038697	0.260784
Bradyrhizobium ottawaense	689.9988	-1.0832	0.52462	-2.06473	0.038949	0.261432
Pseudomonas savastanoi	13.81628	-2.87858	1.393951	-2.06505	0.038918	0.261432
Pseudomonas knackmussii	123.5457	-0.94494	0.458906	-2.05911	0.039484	0.261825
Bosea vaviloviae	153.6518	-1.08595	0.527144	-2.06006	0.039393	0.261825
Burkholderia sp. Bp7605	277.5102	-1.08265	0.526432	-2.05657	0.039727	0.261825
Desulfobulbus sp. ORNL	37.66159	-1.11863	0.543915	-2.05663	0.039722	0.261825
Halomonas sp. KO116	14.17852	-2.32523	1.130321	-2.05714	0.039673	0.261825
Stappia sp. ES.058	49.61759	-1.00967	0.489687	-2.06186	0.039221	0.261825
Serpentinomonas mccroryi	197.6561	-1.0012	0.486571	-2.05766	0.039622	0.261825
Propionibacterium freudenreichii	467.8679	-0.77552	0.376761	-2.05839	0.039553	0.261825

<i>Brenneria goodwinii</i>	13.03815	-1.46805	0.712599	-2.06013	0.039386	0.261825
<i>Streptomyces reticuli</i>	64.84636	-1.11503	0.541115	-2.06062	0.039339	0.261825
<i>Synechococcus</i> sp. PCC 7336	14.89526	-1.53209	0.745303	-2.05566	0.039815	0.261839
<i>Brevibacterium siliguriense</i>	245.1817	-0.93829	0.456697	-2.05451	0.039926	0.261839
<i>Pseudomonas resinovorans</i>	130.0303	-1.11568	0.543288	-2.05357	0.040017	0.261839
<i>Geobacter bemidjensis</i>	25.51809	-1.55488	0.757114	-2.0537	0.040005	0.261839
<i>Clostridium novyi</i>	36.54554	1.211682	0.590828	2.050819	0.040285	0.262155
<i>Methylibium petroleiphilum</i>	704.7983	-1.10585	0.539562	-2.04954	0.04041	0.262155
<i>Bosea</i> sp. AS-1	161.1735	-1.00911	0.491839	-2.05171	0.040198	0.262155
<i>Mesorhizobium oceanicum</i>	77.50083	-0.90257	0.440545	-2.04875	0.040487	0.262155
<i>Rhodobaca barguzinensis</i>	15.88995	-1.63082	0.79583	-2.04921	0.040441	0.262155
<i>Mycolicibacterium rhodesiae</i>	137.8251	-0.8329	0.406848	-2.0472	0.040638	0.262155
<i>Aureimonas</i> sp. AU20	90.24364	-1.17728	0.575079	-2.04716	0.040642	0.262155
<i>Bifidobacterium scardovii</i>	44.07463	-0.85311	0.416612	-2.04773	0.040587	0.262155
<i>Atopobium parvulum</i>	149.9146	-1.27472	0.626288	-2.03536	0.041815	0.263101
<i>Paraburkholderia phytofirmans</i>	3733.867	-1.11252	0.546789	-2.03464	0.041887	0.263101
<i>Burkholderia</i> sp. JP2-270	209.7013	-1.10253	0.541054	-2.03775	0.041575	0.263101
<i>Natronococcus occultus</i>	13.91119	-1.69151	0.832501	-2.03184	0.04217	0.263101
<i>Halioglobus pacificus</i>	12.6363	-1.96367	0.968178	-2.02821	0.042538	0.263101
<i>Olsenella</i> sp. GAM18	21.72054	-1.31784	0.648255	-2.0329	0.042062	0.263101
<i>Azotobacter chroococcum</i>	120.8283	-1.06854	0.524982	-2.03539	0.041812	0.263101
<i>Clostridium</i> sp. DL-VIII	31.66012	1.08755	0.536086	2.028686	0.04249	0.263101
<i>Luteibacter rhizovicinus</i>	82.61218	-0.89106	0.438666	-2.03129	0.042226	0.263101
<i>Arcobacter</i> sp. L	11.34484	3.563391	1.757404	2.027644	0.042597	0.263101
<i>Burkholderia pseudomallei</i>	2104.637	-1.19598	0.589101	-2.03017	0.042339	0.263101
<i>Frankia inefficax</i>	117.5753	-0.98081	0.480428	-2.04153	0.041198	0.263101
<i>Chlorobium chlorochromatii</i>	4.539451	-2.49079	1.222761	-2.03702	0.041648	0.263101
<i>Paenibacillus ihbetae</i>	7.766523	-2.00743	0.984119	-2.03982	0.041368	0.263101
<i>Staphylococcus</i> sp. AntiMn-1	27.19047	-2.30598	1.136645	-2.02876	0.042483	0.263101
<i>Thauera humireducens</i>	98.98766	-1.17122	0.57742	-2.02837	0.042522	0.263101
<i>Chelatococcus</i> sp. CO-6	126.0558	-1.07671	0.530865	-2.02822	0.042538	0.263101
<i>Synechococcus</i> sp. KORDI-100	5.215298	-2.5144	1.235967	-2.03436	0.041916	0.263101
<i>Delftia acidovorans</i>	626.2661	-1.24454	0.609869	-2.04067	0.041284	0.263101
<i>Lysobacter maris</i>	105.8091	-1.01145	0.495128	-2.04281	0.041071	0.263101
<i>Rhodovulum</i> sp. P5	49.5127	-1.10921	0.543683	-2.04017	0.041333	0.263101
<i>Nitrosomonas ureae</i>	34.72659	-1.43492	0.704023	-2.03818	0.041532	0.263101
<i>Rhizobium</i> sp. ACO-34A	69.26793	-0.9807	0.483554	-2.02811	0.042549	0.263101
<i>Shewanella loihica</i>	21.20789	-1.19566	0.585677	-2.04149	0.041202	0.263101
<i>Streptomyces</i> sp. Tu6071	14.60313	-2.96318	1.459832	-2.02981	0.042376	0.263101
<i>Aromatoleum aromaticum</i>	89.44839	-1.077	0.531857	-2.02499	0.042869	0.264333
<i>Marinobacter salarius</i>	20.38511	-1.41653	0.700312	-2.02272	0.043102	0.264876
<i>Mesorhizobium opportunistum</i>	105.7083	-1.10053	0.543971	-2.02315	0.043058	0.264876
<i>Desulfotalea psychrophila</i>	4.461436	-2.99643	1.48279	-2.02081	0.0433	0.264958
<i>Arcobacter mytili</i>	9.874714	3.05319	1.511126	2.020473	0.043334	0.264958
<i>Lysobacter enzymogenes</i>	257.8126	-0.8938	0.44226	-2.02098	0.043281	0.264958
<i>Polaribacter</i> sp. SA4-10	10.17109	2.739342	1.36259	2.010393	0.04439	0.266014
<i>Salipiger profundus</i>	92.54433	-1.03499	0.516107	-2.00538	0.044923	0.266014
<i>Burkholderia</i> sp. NRF60-BP8	146.5554	-1.16312	0.577706	-2.01335	0.044078	0.266014
<i>Pontimonas salivibrio</i>	22.52885	-1.20098	0.597063	-2.01148	0.044275	0.266014
<i>Anaeromyxobacter dehalogenans</i>	149.1962	-1.00928	0.501333	-2.01319	0.044095	0.266014

<i>Frateuria aurantia</i>	52.88063	-1.08197	0.53927	-2.00635	0.044818	0.266014
<i>Streptococcus pluranimalium</i>	27.91556	-1.70322	0.845563	-2.0143	0.043978	0.266014
<i>Leuconostoc garlicum</i>	5.200691	-3.00721	1.494028	-2.01282	0.044133	0.266014
<i>Actinoplanes derwentensis</i>	155.4208	-0.78017	0.388448	-2.00843	0.044598	0.266014
<i>Pseudarthrobacter chlorophenolicus</i>	126.5971	-0.739	0.368554	-2.00515	0.044947	0.266014
<i>Cronobacter muytjensii</i>	11.0115	-2.14676	1.06678	-2.01238	0.04418	0.266014
<i>Mesorhizobium japonicum</i>	86.81095	-1.25336	0.623915	-2.00886	0.044552	0.266014
<i>Streptomyces cyaneogriseus</i>	42.08195	-1.48786	0.738573	-2.01451	0.043956	0.266014
<i>Erythrobacter</i> sp. Alg231-14	12.05674	-1.87724	0.935382	-2.00693	0.044757	0.266014
<i>Methanococcus maripaludis</i>	14.05558	1.98705	0.991545	2.003994	0.045071	0.266014
<i>Myxococcus macrosporus</i>	161.0961	-0.99519	0.494156	-2.01393	0.044017	0.266014
<i>Streptomyces</i> sp. Mg1	52.54824	-1.22074	0.609279	-2.00357	0.045116	0.266014
<i>Clostridium saccharobutylicum</i>	34.45142	1.499813	0.745604	2.01154	0.044268	0.266014
<i>Ethanoligenens harbinense</i>	25.12761	-1.53298	0.764733	-2.00459	0.045007	0.266014
<i>Paraburkholderia phenoliruptrix</i>	926.9914	-1.24695	0.621952	-2.0049	0.044974	0.266014
<i>Burkholderia plantarii</i>	563.499	-1.09217	0.542665	-2.0126	0.044156	0.266014
<i>Kurthia</i> sp. 11kri321	17.23796	-2.05974	1.026485	-2.0066	0.044793	0.266014
<i>Massilia</i> sp. WG5	464.2959	-1.12449	0.562029	-2.00076	0.045418	0.266873
<i>Fimbriimonas ginsengisoli</i>	31.57985	-1.23512	0.617323	-2.00077	0.045417	0.266873
<i>Cupriavidus nantongensis</i>	542.6339	-1.26787	0.633878	-2.00017	0.045481	0.266873
<i>Xylella taiwanensis</i>	8.72016	-1.95007	0.976018	-1.99799	0.045718	0.267828
<i>Mesorhizobium ciceri</i>	359.9747	-1.03541	0.518578	-1.99663	0.045865	0.267831
<i>Kitasatospora albolonga</i>	63.8445	-1.10399	0.552929	-1.99663	0.045865	0.267831
<i>Hydrogenophaga</i> sp. PBC	693.7178	-1.06431	0.533235	-1.99594	0.04594	0.267836
<i>Salinivirga cyanobacteriivorans</i>	5.547855	-2.78123	1.396127	-1.99211	0.04636	0.269849
<i>Dickeya dianthicola</i>	24.96843	-1.91751	0.963438	-1.99028	0.04656	0.270153
<i>Pantoea stewartii</i>	16.47738	-1.48857	0.747668	-1.99095	0.046487	0.270153
<i>Leptolyngbya</i> sp. O-77	24.04206	-1.38033	0.695053	-1.98593	0.047041	0.27251
<i>Mycobacterium marseillense</i>	75.22022	-0.79518	0.400855	-1.98371	0.047288	0.273504
<i>Acidovorax citrulli</i>	425.9206	-1.05537	0.532935	-1.98031	0.047669	0.275204
<i>Hyphomonas neptunium</i>	16.44598	-1.70906	0.864743	-1.97638	0.048112	0.275204
<i>Streptomyces albidoflavus</i>	12.53208	-3.5195	1.780346	-1.97686	0.048057	0.275204
<i>Methyloceanibacter</i> sp. wino2	43.18165	-1.05037	0.53063	-1.97947	0.047763	0.275204
<i>Xenorhabdus nematophila</i>	5.084416	-3.28662	1.661574	-1.97801	0.047927	0.275204
<i>Pseudomonas balearica</i>	69.23482	-0.9724	0.491891	-1.97686	0.048058	0.275204
<i>Chromobacterium rhizoryzae</i>	67.74598	-0.94548	0.478121	-1.97748	0.047987	0.275204
<i>Methanosarcina horonobensis</i>	4.350607	-3.56039	1.803624	-1.97402	0.048379	0.275388
<i>Janthinobacterium</i> sp. 1_2014MBL_MicD	202.557	-1.04152	0.52913	-1.96837	0.049026	0.275388
<i>Opiritus</i> sp. GAS368	65.958	-1.06649	0.541694	-1.96881	0.048975	0.275388
<i>Streptosporangium roseum</i>	119.7382	-0.74123	0.375735	-1.97275	0.048524	0.275388
<i>Enterococcus thailandicus</i>	7.18122	-2.1847	1.107472	-1.97269	0.04853	0.275388
<i>Ramlibacter tataouinensis</i>	1399.853	-1.0277	0.52088	-1.97301	0.048495	0.275388
<i>Streptomyces globisporus</i>	81.51059	-1.07554	0.546563	-1.96782	0.049089	0.275388
<i>Sphingomonas wittichii</i>	220.3546	-0.95237	0.483367	-1.97029	0.048805	0.275388
<i>Roseobacter litoralis</i>	17.0225	-1.62649	0.824908	-1.97172	0.048641	0.275388
<i>Paraburkholderia hospita</i>	1034.551	-1.11061	0.563491	-1.97094	0.048731	0.275388
<i>Natronomonas moolapensis</i>	9.207816	-2.12172	1.078393	-1.96748	0.049128	0.275388
<i>Acidaminococcus fermentans</i>	13.4747	-1.59156	0.808353	-1.9689	0.048965	0.275388
<i>Natronobacterium gregoryi</i>	5.544264	-3.07348	1.559602	-1.97068	0.048761	0.275388
<i>Ottowia oryzae</i>	428.7981	-1.13327	0.576247	-1.96665	0.049224	0.275502

<i>Thermomicrobium roseum</i>	12.64715	-1.74865	0.89027	-1.96418	0.04951	0.276677
<i>Pseudoalteromonas arctica</i>	7.305411	-3.95734	2.017755	-1.96126	0.049849	0.277293
<i>Sinorhizobium fredii</i>	283.3686	-0.87538	0.446333	-1.96127	0.049847	0.277293
<i>Candidatus Thiodictyon syntrophicum</i>	82.00162	-1.00315	0.51131	-1.96192	0.049772	0.277293
<i>Myxococcus fulvus</i>	134.9048	-0.88018	0.450161	-1.95526	0.050552	0.278046
<i>Burkholderia cenocepacia</i>	1950.213	-1.07193	0.548526	-1.9542	0.050677	0.278046
<i>Xanthomonas phaseoli</i>	150.2232	-1.41585	0.723196	-1.95777	0.050257	0.278046
<i>Stenotrophomonas sp. YAU14D1_LEIMI4</i>	31.45561	-2.16086	1.106212	-1.95339	0.050774	0.278046
<i>Polaromonas naphthalenivorans</i>	498.5703	-0.9907	0.50752	-1.95204	0.050934	0.278046
<i>Paenibacillus swuensis</i>	9.254763	-1.7319	0.886943	-1.95266	0.05086	0.278046
<i>Pseudomonas alcaligenes</i>	82.05727	-0.96993	0.495196	-1.95868	0.05015	0.278046
<i>Comamonas aquatica</i>	410.442	-0.94836	0.484483	-1.95747	0.050292	0.278046
<i>Bradyrhizobium sp. SK17</i>	551.2775	-0.97552	0.49865	-1.95632	0.050428	0.278046
<i>Arcobacter ellisii</i>	10.05856	2.957699	1.514918	1.952382	0.050893	0.278046
<i>Leptothrix cholodnii</i>	683.3294	-1.06929	0.547883	-1.95167	0.050978	0.278046
<i>Aminomonas paucivorans</i>	10.99231	-1.38624	0.709193	-1.95467	0.050622	0.278046
<i>Burkholderia stabilis</i>	606.8436	-1.01307	0.517895	-1.95613	0.05045	0.278046
<i>Robiginitalea biformata</i>	14.77055	-1.59696	0.819002	-1.94988	0.05119	0.278369
<i>Chelatococcus daeguensis</i>	82.9833	-1.26805	0.650195	-1.95026	0.051145	0.278369
<i>Thermogutta terrifontis</i>	6.162704	-1.79232	0.920878	-1.94632	0.051616	0.279336
<i>Halobacterium sp. DL1</i>	23.36695	-1.54771	0.795396	-1.94583	0.051675	0.279336
<i>Pseudohongiella spirulinae</i>	3.3028	-3.09452	1.589308	-1.94709	0.051524	0.279336
<i>Streptomyces albulus</i>	86.21858	-0.76582	0.393526	-1.94606	0.051648	0.279336
<i>Streptomyces sp. CB09001</i>	32.14666	-1.28008	0.658819	-1.94299	0.052017	0.280769
<i>Bradyrhizobium sp. ORS 278</i>	193.1088	-0.91796	0.473016	-1.94066	0.052299	0.281875
<i>Zobellella denitrificans</i>	61.95516	-1.08989	0.563237	-1.93504	0.052985	0.285146
<i>Paenibacillus glucanolyticus</i>	18.70821	-1.64842	0.852577	-1.93346	0.053179	0.285771
<i>Cryobacterium sp. LW097</i>	102.6738	-0.98546	0.510291	-1.93117	0.053461	0.28644
<i>Pseudomonas xanthomarina</i>	27.51978	-1.15329	0.59714	-1.93136	0.053438	0.28644
<i>Sphingomonas sp. MM-1</i>	155.0713	-1.04682	0.542441	-1.92983	0.053627	0.286601
<i>Lactobacillus jensenii</i>	44.79921	1.463548	0.758449	1.92966	0.053649	0.286601
<i>Campylobacter gracilis</i>	125.5727	-1.34745	0.699903	-1.92519	0.054205	0.286823
<i>Serratia marcescens</i>	242.9782	-0.79985	0.415473	-1.92516	0.054209	0.286823
<i>Streptococcus agalactiae</i>	674.1185	1.026693	0.533054	1.926059	0.054097	0.286823
<i>Diaphorobacter polyhydroxybutyrativora</i>	1039.434	-1.14242	0.59387	-1.92368	0.054395	0.286823
<i>Salinarchaeum sp. Harcht-Bsk1</i>	12.57477	-1.6599	0.861671	-1.92638	0.054057	0.286823
<i>Endozoicomonas montiporae</i>	4.415775	-2.66958	1.384247	-1.92854	0.053788	0.286823
<i>Pseudomonas saudiphocaensis</i>	23.27971	-1.31679	0.684534	-1.92364	0.0544	0.286823
<i>Thiolapillus brandeum</i>	10.8845	-1.63316	0.848701	-1.92431	0.054316	0.286823
<i>Streptomyces alboflavus</i>	67.81868	-0.92165	0.478328	-1.92682	0.054002	0.286823
<i>Thiomonas intermedia</i>	234.8241	-0.93972	0.492893	-1.90654	0.05658	0.286897
<i>Pirellula staleyi</i>	13.2394	-1.41308	0.738191	-1.91425	0.055588	0.286897
<i>Halothiobacillus neapolitanus</i>	19.94744	-1.35202	0.70621	-1.91447	0.05556	0.286897
<i>Rhodococcus sp. WB1</i>	28.08025	-2.13676	1.121659	-1.905	0.05678	0.286897
<i>Pseudomonas asplenii</i>	13.40002	-2.27351	1.190504	-1.9097	0.056172	0.286897
<i>Streptomyces sp. NEAU-S7GS2</i>	107.4546	-0.86132	0.449975	-1.91414	0.055602	0.286897
<i>Candidatus Babela massiliensis</i>	3.498963	4.574197	2.396281	1.908873	0.056278	0.286897
<i>Alkalilimnicola ehrlichii</i>	41.17225	-0.99158	0.519255	-1.90963	0.056181	0.286897
<i>Mycoplasma hominis</i>	6.03001	2.800669	1.468767	1.906817	0.056544	0.286897
<i>Staphylococcus stepanovicii</i>	88.28388	1.390734	0.729227	1.907136	0.056503	0.286897

Frankia symbiont of <i>Datisca glomerata</i>	78.71488	-0.74343	0.389245	-1.90992	0.056143	0.286897
<i>Burkholderia vietnamiensis</i>	812.7878	-1.21121	0.634738	-1.9082	0.056365	0.286897
<i>Nocardia terpenica</i>	154.7023	-0.90751	0.47582	-1.90725	0.056488	0.286897
<i>Desulfovibrio fairfieldensis</i>	20.84675	-1.44545	0.757574	-1.908	0.056391	0.286897
<i>Kiritimatiella glycovorans</i>	27.26604	-1.29883	0.67829	-1.91486	0.05551	0.286897
<i>Castellaniella defragrans</i>	191.56	-1.04101	0.543073	-1.91689	0.055252	0.286897
<i>Paludisphaera borealis</i>	95.08039	-0.84548	0.439851	-1.9222	0.05458	0.286897
<i>Methylorubrum populi</i>	285.1172	-0.76563	0.400737	-1.91055	0.056062	0.286897
<i>Megasphaera hexanoica</i>	12.34926	-1.71414	0.893443	-1.91858	0.055038	0.286897
<i>Rhodanobacter denitrificans</i>	175.5372	-0.9775	0.511719	-1.91023	0.056103	0.286897
<i>Mycobacterium colombiense</i>	101.3558	-0.74772	0.392404	-1.90549	0.056716	0.286897
<i>Chromobacterium</i> sp. IIBBL 112-1	33.47682	-2.93681	1.538028	-1.90947	0.056202	0.286897
<i>Paenibacillus</i> sp. FSL R5-0345	5.208972	-2.36001	1.227408	-1.92276	0.05451	0.286897
<i>Leuconostoc lactis</i>	5.941719	-3.67134	1.919987	-1.91217	0.055854	0.286897
<i>Actinomyces</i> sp. oral taxon 414	935.0356	-1.03656	0.540281	-1.91856	0.05504	0.286897
<i>Lysobacter antibioticus</i>	106.6581	-0.93921	0.490977	-1.91294	0.055755	0.286897
<i>Melittangium boletus</i>	88.39072	-0.90393	0.470574	-1.92091	0.054743	0.286897
<i>Sphingomonas</i> sp. YZ-8	31.72271	-1.26917	0.665829	-1.90616	0.05663	0.286897
<i>Paenibacillus</i> sp. FSL R7-0331	10.36784	-1.71918	0.898991	-1.91234	0.055832	0.286897
<i>Sphingomonas koreensis</i>	174.8556	-0.9039	0.473785	-1.90784	0.056412	0.286897
<i>Nocardiopsis gilva</i>	82.53712	-0.80372	0.422132	-1.90396	0.056915	0.286981
<i>Cellulomonas fimi</i>	236.6279	-0.85757	0.450484	-1.90366	0.056955	0.286981
<i>Bacillus weihaiensis</i>	6.183021	-2.23057	1.172859	-1.90183	0.057194	0.28769
<i>Pseudomonas sabulinigri</i>	36.37352	-1.00221	0.5271	-1.90137	0.057253	0.28769
<i>Mycolicibacterium litorale</i>	118.8565	-0.70119	0.36908	-1.89984	0.057454	0.2883
<i>Burkholderia ubonensis</i>	1162.147	-1.00326	0.529369	-1.8952	0.058067	0.288358
<i>Novosphingobium</i> sp. PP1Y	52.39447	-1.07296	0.566625	-1.89359	0.058279	0.288358
<i>Aeromonas</i> sp. ASNIH3	288.7873	-1.23714	0.653089	-1.89428	0.058187	0.288358
<i>Rhizobium tropici</i>	49.40322	-1.11723	0.588847	-1.89733	0.057785	0.288358
<i>Burkholderia multivorans</i>	1142.131	-1.01234	0.533916	-1.89607	0.057951	0.288358
<i>Halomonas</i> sp. JS92-SW72	151.737	-1.11986	0.591243	-1.89408	0.058214	0.288358
<i>Luteimonas</i> sp. JM171	75.19359	-1.03208	0.544768	-1.89454	0.058153	0.288358
<i>Desulfococcus oleovorans</i>	9.186825	-1.43274	0.755862	-1.89551	0.058025	0.288358
<i>Mycolicibacterium vanbaalenii</i>	207.6783	-0.77529	0.409413	-1.89367	0.058268	0.288358
<i>Geobacter uraniireducens</i>	18.8806	-1.30771	0.688799	-1.89854	0.057625	0.288358
<i>Cellvibrio</i> sp. PSBB006	10.75844	-1.37913	0.728484	-1.89315	0.058337	0.288358
<i>Kosakonia cowanii</i>	43.18606	-1.42138	0.751609	-1.89112	0.058609	0.288913
<i>Bifidobacterium actinocoloniiforme</i>	18.24168	-1.13187	0.598449	-1.89134	0.058578	0.288913
<i>Stenotrophomonas</i> sp. ZAC14D2_NAIMI4	38.88718	-1.70658	0.903168	-1.88955	0.058818	0.289554
<i>Chlorobaculum limnaeum</i>	20.71421	-1.66364	0.88072	-1.88895	0.058898	0.289556
<i>Alicyclobacillus acidocaldarius</i>	118.594	-0.98751	0.523306	-1.88706	0.059152	0.289659
<i>Caulobacter vibrioides</i>	203.1776	-0.8825	0.467578	-1.88738	0.05911	0.289659
<i>Sphingomonas sanxanigenens</i>	158.6225	-0.7777	0.41213	-1.88702	0.059158	0.289659
<i>Sulfurifustis variabilis</i>	63.67082	-0.91689	0.4862	-1.88583	0.059318	0.29005
<i>Achromobacter xylosoxidans</i>	946.3929	-0.88429	0.469097	-1.8851	0.059417	0.290146
<i>Polynucleobacter asymbioticus</i>	14.35176	-2.27547	1.207767	-1.88403	0.05956	0.290248
<i>Crenobacter</i> sp. K1W11S-77	94.38934	-1.10935	0.588904	-1.88376	0.059597	0.290248
<i>Bacillus</i> sp. FJAT-45348	20.22851	2.427333	1.289022	1.88308	0.059689	0.29029
<i>Buchnera aphidicola</i>	79.10302	0.99804	0.530162	1.882518	0.059766	0.29029
<i>Rhizobium phaseoli</i>	132.3072	-1.17684	0.626093	-1.87966	0.060154	0.291139

Neorhizobium sp. NCHU2750	50.45074	-1.04627	0.556843	-1.87894	0.060253	0.291139
Ochrobactrum pituitosum	25.98573	-1.89168	1.006811	-1.87888	0.060261	0.291139
Streptomyces rubrolavendulae	69.18274	-0.87941	0.467781	-1.87996	0.060114	0.291139
Staphylococcus lutrae	36.78856	1.804659	0.961593	1.87674	0.060554	0.292168
Ferrimonas balearica	16.0061	-1.09644	0.585234	-1.87351	0.060998	0.293534
Sphingobium cloacae	127.1983	-0.90787	0.484535	-1.87368	0.060974	0.293534
Staphylococcus succinus	376.76	-1.74933	0.934727	-1.87149	0.061278	0.294488
Burkholderia sp. MSMB0266	138.5799	-1.38062	0.737976	-1.87082	0.061371	0.294546
Sphingopyxis sp. FD7	51.45149	-1.25521	0.67171	-1.86868	0.061667	0.295135
Azoarcus olearius	141.3675	-1.20589	0.645689	-1.8676	0.061818	0.295135
Luteitalea pratensis	122.1369	-0.86405	0.462351	-1.86881	0.061649	0.295135
Mycolicibacterium smegmatis	193.3618	-0.6166	0.330104	-1.86789	0.061777	0.295135
Sulfitobacter sp. AM1-D1	46.54172	-1.04465	0.559805	-1.86609	0.062029	0.295755
Chromobacterium vaccinii	108.4141	-0.88435	0.47415	-1.86512	0.062164	0.296012
Rivularia sp. PCC 7116	15.19092	1.971923	1.058873	1.862285	0.062563	0.296049
Pseudomonas sp. CMR12a	54.00917	-1.28003	0.687149	-1.86281	0.062489	0.296049
Pediococcus damnosus	5.075937	-2.74679	1.473279	-1.86441	0.062265	0.296049
Bordetella sp. N	119.5857	-0.9828	0.527665	-1.86255	0.062526	0.296049
Gammapapillomavirus 9	5.454305	-5.27693	2.833752	-1.86217	0.062579	0.296049
Mycolicibacterium thermoresistibile	131.5326	-0.66712	0.358437	-1.86119	0.062717	0.29632
Collimonas pratensis	193.4353	-0.95785	0.515454	-1.85827	0.063131	0.296732
Plantibacter flavus	132.1549	-0.87585	0.471187	-1.85883	0.063052	0.296732
Jeotgalibaca sp. PTS2502	12.00188	-1.63203	0.878255	-1.85827	0.063131	0.296732
Alteromonas australica	7.102789	-2.58168	1.38925	-1.85833	0.063123	0.296732
Sagittula sp. P11	73.9865	-0.86485	0.465849	-1.8565	0.063382	0.297144
Chelativorans sp. BNC1	57.06935	-0.78379	0.422127	-1.85677	0.063345	0.297144
Sphingomonas indica	66.31145	-0.86173	0.464523	-1.85508	0.063585	0.297172
Mycobacterium dioxanotrophicus	153.4899	-0.54301	0.292695	-1.85522	0.063565	0.297172
Bordetella pseudohinzii	90.18769	-1.18878	0.64094	-1.85474	0.063633	0.297172
Novosphingobium aromaticivorans	52.81291	-0.89339	0.481922	-1.8538	0.063768	0.297421
Enterococcus sp. FDAARGOS_553	8.847082	-2.439	1.316217	-1.85303	0.063877	0.29755
Niabella ginsenosidivorans	45.12254	-1.09246	0.590392	-1.85039	0.064257	0.297612
Marinobacter hydrocarbonoclasticus	28.48731	-0.96697	0.522532	-1.85055	0.064234	0.297612
Bifidobacterium choerinum	30.18504	-1.00069	0.540886	-1.8501	0.0643	0.297612
Kozakia baliensis	11.11121	-1.41176	0.763	-1.85027	0.064275	0.297612
Vagococcus penaei	8.774255	-1.78519	0.9644	-1.85109	0.064157	0.297612
Pseudomonas prosekii	43.89066	-1.28672	0.69576	-1.84937	0.064404	0.297666
Nostoc sp. 'Peltigera membranacea cyanoc	8.43543	3.099543	1.676444	1.848879	0.064475	0.297666
Thauera sp. MZ1T	144.4025	-0.92601	0.50102	-1.84826	0.064565	0.297704
Streptomyces actuosus	78.76107	-0.86586	0.468794	-1.847	0.064747	0.298166
Sulfuritalea hydrogenivorans	193.4989	-1.09661	0.594621	-1.84422	0.06515	0.299265
Oceanimonas sp. GK1	30.99249	-0.83875	0.454694	-1.84465	0.065088	0.299265
Thermodesulfovibrio yellowstonii	6.032266	-2.40668	1.305382	-1.84366	0.065233	0.299265
Rubrobacter xylanophilus	68.08941	-1.02805	0.557953	-1.84253	0.065397	0.299642
Pseudomonas palleroniana	34.3598	-0.91225	0.495975	-1.8393	0.065871	0.300677
Caulobacter flavus	167.8679	-0.79788	0.433665	-1.83984	0.065791	0.300677
Nocardia nova	135.9707	-0.71521	0.38877	-1.83967	0.065817	0.300677
Paenibacillus crassostreae	4.403988	-2.24735	1.223749	-1.83645	0.066291	0.301147
Brenneria sp. EniD312	17.86562	-1.24671	0.678803	-1.83664	0.066263	0.301147
Nitrospira moscoviensis	26.88746	-1.08832	0.592655	-1.83635	0.066305	0.301147

Aminobacter sp. MSH1	102.1976	-0.9132	0.496865	-1.83793	0.066073	0.301147
Mannheimia varigena	7.800193	-2.07046	1.128012	-1.83549	0.066433	0.301349
Janthinobacterium sp. Marseille	62.87962	-0.97644	0.533382	-1.83066	0.067151	0.301356
Mycobacterium tuberculosis	256.816	-2.89717	1.579726	-1.83397	0.066659	0.301356
Lactobacillus sp. HBUAS2074	4.362128	-2.38023	1.301014	-1.82952	0.067322	0.301356
Delftia sp. Cs1-4	525.8989	-1.03116	0.563435	-1.83013	0.06723	0.301356
Planctomyces sp. SH-PL14	61.98355	-0.80975	0.442272	-1.83088	0.067118	0.301356
Desulfovibrio africanus	39.39503	-1.1135	0.607403	-1.83321	0.066771	0.301356
Shewanella algae	17.42248	-1.35429	0.739879	-1.83042	0.067187	0.301356
Aeromicrobium sp. A1-2	117.9728	-0.94974	0.518496	-1.83172	0.066994	0.301356
Polynucleobacter acidiphobus	5.131239	-1.84209	1.006415	-1.83035	0.067198	0.301356
Pseudomonas simiae	4.418808	-4.20827	2.300402	-1.82936	0.067345	0.301356
Staphylococcus capitis	44447.03	1.142181	0.623579	1.831653	0.067003	0.301356
Sphingopyxis macrogoltabida	148.8174	-1.02497	0.561237	-1.82628	0.067808	0.301599
Azospirillum sp. CFH 70021	181.6987	-0.90473	0.494924	-1.82801	0.067548	0.301599
Olleya sp. Bg11-27	6.753192	2.347426	1.285038	1.826737	0.067739	0.301599
Limnochorda pilosa	91.48088	-0.94504	0.517635	-1.82569	0.067897	0.301599
Planococcus rifietoensis	10.76032	-2.08933	1.144314	-1.82584	0.067875	0.301599
Candidatus Nitrospira inopinata	16.97039	-1.7917	0.98074	-1.82689	0.067716	0.301599
Streptomyces olivoreticuli	86.18801	-0.9112	0.499994	-1.82243	0.06839	0.303079
Burkholderia sp. CCGE1001	832.2561	-1.19102	0.65355	-1.82238	0.068397	0.303079
Mycobacterium kansasii	100.0878	-0.64445	0.354266	-1.81912	0.068894	0.303558
Sphingobium hydrophobicum	74.98268	-0.98467	0.540799	-1.82077	0.068641	0.303558
Micromonospora echinaurantiaca	91.5616	-0.98017	0.540456	-1.81359	0.069741	0.303558
Caulobacter sp. K31	179.1832	-0.94647	0.522061	-1.81295	0.06984	0.303558
Geobacter lovleyi	11.03848	-1.24758	0.68762	-1.81435	0.069624	0.303558
Burkholderia sp. MSMB1588	115.975	-1.7819	0.982518	-1.81361	0.069738	0.303558
Achromobacter sp. AONIH1	273.0072	-0.969	0.534314	-1.81354	0.069748	0.303558
Steroidobacter denitrificans	35.60071	-0.93973	0.518256	-1.81325	0.069794	0.303558
Burkholderia sp. KK1	299.2295	-1.04362	0.57493	-1.81522	0.06949	0.303558
Granulosicoccus antarcticus	8.714046	-1.34802	0.741938	-1.8169	0.069233	0.303558
Streptomyces atratus	84.07775	-0.8293	0.457075	-1.81437	0.069621	0.303558
Gallionella capsiferiformans	31.8253	-1.14106	0.627364	-1.81881	0.06894	0.303558
Beutenbergia cavernae	117.0721	-0.85304	0.469061	-1.81861	0.068971	0.303558
Altererythrobacter mangrovi	24.30338	-1.05088	0.579403	-1.81374	0.069718	0.303558
Pedobacter cryoconitis	15.38631	-1.61521	0.887773	-1.8194	0.068851	0.303558
Brachyspira murdochii	12.51356	2.263997	1.247061	1.815467	0.069452	0.303558
Neisseria sp. 10022	25.00185	-1.46275	0.80737	-1.81174	0.070026	0.304003
Pannonibacter phragmitetus	170.9858	-0.84731	0.468424	-1.80886	0.070473	0.305522
Cupriavidus gilardii	581.5004	-0.92789	0.513099	-1.8084	0.070544	0.305522
Zymobacter palmae	15.96485	-1.19608	0.66181	-1.80729	0.070717	0.305906
Tateyamaria omphalii	24.56121	-1.33513	0.739984	-1.80427	0.07119	0.307525
Microbacterium paludicola	173.7345	-0.84249	0.467058	-1.80382	0.07126	0.307525
Burkholderia sp. MSMB0856	160.8559	-1.092	0.605851	-1.80243	0.071478	0.307698
Bordetella flabilis	108.8996	-0.86629	0.480751	-1.80195	0.071554	0.307698
Pseudomonas yamanorum	94.0841	-1.00161	0.555685	-1.80247	0.071471	0.307698
Ereboglobus luteus	30.62462	-1.27065	0.705518	-1.80101	0.071701	0.307968
Acidobacteriaceae bacterium SBC82	24.90365	-1.10988	0.616472	-1.80037	0.071802	0.308036
Microbacterium sp. BH-3-3-3	145.9816	-0.84196	0.468193	-1.79832	0.072127	0.30834
Actinomyces sp. 2129	134.9698	-0.63959	0.355552	-1.79886	0.07204	0.30834

<i>Azospirillum thiophilum</i>	119.0085	-0.80687	0.448664	-1.79838	0.072117	0.30834
<i>Staphylococcus pseudintermedius</i>	298.2127	1.244401	0.692237	1.797653	0.072232	0.308427
<i>Kitasatospora aureofaciens</i>	91.31495	-0.80374	0.447286	-1.79693	0.072346	0.308553
Coriobacteriaceae bacterium 68-1-3	43.63453	-1.05121	0.585475	-1.79549	0.072576	0.309168
<i>Polynucleobacter diffcilis</i>	9.480608	-1.60839	0.89645	-1.79418	0.072784	0.309693
<i>Deinococcus maricopensis</i>	52.50943	-0.87461	0.487932	-1.79248	0.073056	0.310126
<i>Pseudomonas</i> sp. 09C 129	12.69457	-2.45471	1.369105	-1.79293	0.072984	0.310126
<i>Streptomyces</i> sp. P3	88.49443	-0.87583	0.488826	-1.79169	0.073182	0.310299
<i>Orientia tsutsugamushi</i>	5.182215	3.644275	2.036495	1.789484	0.073537	0.311045
<i>Oligella urethralis</i>	8.309732	-2.04405	1.141902	-1.79004	0.073448	0.311045
<i>Raoultella planticola</i>	23.01161	-1.62882	0.910462	-1.789	0.073615	0.311045
<i>Pigmentiphaga</i> sp. H8	198.5496	-0.8648	0.483968	-1.78689	0.073955	0.31212
<i>Thermus oshimai</i>	18.03601	-1.20414	0.67427	-1.78583	0.074126	0.312481
<i>Pseudomonas</i> sp. 7SR1	49.22139	-0.86791	0.486321	-1.78465	0.074319	0.312569
<i>Streptomyces fulvissimus</i>	55.12739	-0.90485	0.5069	-1.78506	0.074251	0.312569
Rhodobiaceae bacterium	5.824754	-1.71897	0.964245	-1.78271	0.074633	0.313166
<i>Acidovorax</i> sp. T1	967.1438	-0.94288	0.528813	-1.78301	0.074585	0.313166
<i>Neisseria elongata</i>	438.1565	-1.00466	0.563736	-1.78215	0.074724	0.313187
<i>Serratia</i> sp. YD25	15.53451	-1.47049	0.825519	-1.7813	0.074864	0.313245
<i>Halorubrum lacusprofundi</i>	19.75794	-1.54519	0.867592	-1.78101	0.07491	0.313245
<i>Massilia armeniaca</i>	204.2477	-0.88559	0.497488	-1.78012	0.075057	0.313497
<i>Nitrosospira multiformis</i>	10.43868	-1.59409	0.895808	-1.7795	0.075158	0.313561
<i>Frankia</i> sp. EAN1pec	126.5244	-0.68225	0.383715	-1.77802	0.0754	0.313893
<i>Auraticoccus monumenti</i>	130.2706	-0.75784	0.426241	-1.77796	0.07541	0.313893
Gammaproteobacteria bacterium ESL007	6.135442	-2.62128	1.476256	-1.77563	0.075795	0.314055
<i>Burkholderia anthina</i>	161.5903	-1.22124	0.687308	-1.77685	0.075593	0.314055
<i>Paenibacillus borealis</i>	9.926872	-1.64616	0.926994	-1.7758	0.075765	0.314055
<i>Celeribacter ethanolicus</i>	28.09292	-1.30833	0.736476	-1.77647	0.075655	0.314055
blood disease bacterium A2-HR MARDI	288.3029	-1.38561	0.780772	-1.77467	0.075952	0.314349
<i>Paenibacillus naphthalenovorans</i>	8.722689	-1.58799	0.895575	-1.77315	0.076204	0.314823
<i>Frankia</i> sp. QA3	78.48505	-0.95831	0.540521	-1.77294	0.076239	0.314823
<i>Saccharothrix espanaensis</i>	162.8732	-0.75273	0.425379	-1.76955	0.076803	0.316364
<i>Isoptericola variabilis</i>	151.0538	-0.73213	0.413653	-1.76991	0.076743	0.316364
<i>Microchaete diplosiphon</i>	9.294751	3.5359	1.998674	1.769122	0.076873	0.316364
<i>Aliivibrio salmonicida</i>	3.789904	-2.74225	1.550684	-1.76841	0.076992	0.316493
<i>Candidatus Filomicrobium marinum</i>	16.78256	-1.34045	0.758726	-1.76671	0.077277	0.317307
<i>Bordetella bronchialis</i>	148.177	-0.85938	0.486914	-1.76495	0.077572	0.31816
<i>Xanthomonas campestris</i>	805.2264	0.870748	0.493774	1.763454	0.077824	0.318162
<i>Pseudomonas fulva</i>	277.0791	-0.96875	0.549368	-1.76339	0.077835	0.318162
<i>Methylovorus</i> sp. MP688	13.07444	-2.52683	1.432756	-1.76362	0.077796	0.318162
<i>Streptomyces cattleya</i>	119.6235	-0.80795	0.459113	-1.75981	0.078439	0.318882
<i>Xanthomonas gardneri</i>	25.97548	-2.0581	1.168666	-1.76107	0.078227	0.318882
<i>Gloeobacter kilaeensis</i>	74.69403	-1.12479	0.638645	-1.76122	0.078202	0.318882
<i>Brevundimonas subvibrioides</i>	115.7241	-0.84254	0.478784	-1.75975	0.07845	0.318882
<i>Devosia</i> sp. A16	84.6221	-0.91803	0.521604	-1.76001	0.078405	0.318882
<i>Parvimonas micra</i>	249.088	-0.91347	0.519292	-1.75906	0.078567	0.319004
<i>Stenotrophomonas</i> sp. SAU14A_NAIMI4_	4.897416	-4.35654	2.477702	-1.7583	0.078697	0.319175
<i>Pandoraea pulmonicola</i>	240.1463	-0.93773	0.533989	-1.75608	0.079074	0.320347
<i>Bacillus</i> sp. OxB-1	3.749227	-2.28015	1.302132	-1.75109	0.07993	0.3204
<i>Mesorhizobium amorphae</i>	155.0149	-0.87512	0.499819	-1.75087	0.079967	0.3204

Streptacidiphilus sp. DSM 106435	94.36827	-0.67862	0.387458	-1.75147	0.079866	0.3204
Micromonospora chokoriensis	60.12547	-0.90422	0.516075	-1.75211	0.079755	0.3204
Arcobacter nitrofigilis	11.55169	2.552291	1.456601	1.752224	0.079735	0.3204
Bifidobacterium asteroides	20.23445	-1.27544	0.72846	-1.75087	0.079968	0.3204
Erythrobacter sp. HL-111	58.30601	-0.89687	0.512155	-1.75117	0.079916	0.3204
Rhizobium sp. IE4771	27.87624	-2.23235	1.272815	-1.75387	0.079453	0.3204
Kushneria marisflavi	11.90917	-1.59704	0.910165	-1.75467	0.079315	0.3204
Streptomyces sp. CFMR 7	41.6268	-1.63326	0.931539	-1.7533	0.079551	0.3204
Sphingopyxis sp. QXT-31	71.33149	-0.91976	0.525715	-1.74955	0.080196	0.320609
Arcobacter suis	6.547352	2.488386	1.422176	1.749704	0.080169	0.320609
Ralstonia mannitolilytica	11494	-0.8824	0.504784	-1.74807	0.080452	0.321276
Halorientalis sp. IM1011	23.96594	-1.27259	0.729951	-1.74339	0.081266	0.321496
Candidatus Phaeomarinobacter ectocarpus	14.37801	-1.48635	0.851399	-1.74577	0.080851	0.321496
Leptospira santarosai	38.59238	1.373825	0.787114	1.745396	0.080916	0.321496
Geobacter metallireducens	50.87098	-1.0812	0.620046	-1.74374	0.081204	0.321496
Mycobacterium sp. djl-10	192.1661	-0.54337	0.31152	-1.74427	0.081112	0.321496
Comamonas testosteroni	552.2892	-0.91908	0.526605	-1.74529	0.080935	0.321496
Parvibaculum lavamentivorans	52.9257	-0.9013	0.516168	-1.74614	0.080786	0.321496
Chryseobacterium shandongense	98.90718	-1.00499	0.576039	-1.74466	0.081045	0.321496
Agrobacterium tumefaciens	396.8989	-0.70766	0.405959	-1.74318	0.081302	0.321496
Geminocystis herdmanii	9.551816	1.95236	1.120475	1.742439	0.081432	0.321659
Devriesea agamarum	48.65011	-0.71478	0.410596	-1.74084	0.081712	0.322096
Avibacterium paragallinarum	3.706382	-2.64051	1.517649	-1.73987	0.081882	0.322096
Muricauda ruestringensis	6.519888	-2.06242	1.185688	-1.73943	0.081959	0.322096
Thioalkalivibrio nitratireducens	36.31577	-0.85038	0.488926	-1.73928	0.081985	0.322096
Pseudomonas litoralis	52.86212	-0.99213	0.569993	-1.7406	0.081753	0.322096
Escherichia coli	616.2566	0.729752	0.419959	1.737676	0.082268	0.322859
Lelliottia nimipressuralis	5.317246	-2.12101	1.222106	-1.73554	0.082646	0.323993
Shewanella amazonensis	5.01105	-1.5999	0.923127	-1.73312	0.083073	0.325319
Mycolicibacterium gilvum	298.8054	-0.77313	0.446689	-1.73081	0.083486	0.326582
Oligotropha carboxidovorans	76.80737	-0.84394	0.488402	-1.72796	0.083995	0.328221
Providencia sp. WCHPr000369	5.586186	-2.40331	1.392262	-1.72619	0.084313	0.32911
Variovorax boronicumulans	869.2076	-0.88162	0.511194	-1.72463	0.084595	0.329857
Ochrobactrum sp. A44	41.22513	-1.07346	0.623051	-1.72291	0.084905	0.330072
Lactobacillus plantarum	230.8906	-1.13899	0.661532	-1.72175	0.085115	0.330072
Pseudanabaena sp. PCC 7367	6.79438	-1.82623	1.060386	-1.72223	0.085028	0.330072
Nocardia farcinica	242.1051	-0.58825	0.341593	-1.72207	0.085056	0.330072
Advenella kashmirensis	30.4198	-1.359	0.789514	-1.72131	0.085194	0.330072
Martelella endophytica	42.64492	-0.96935	0.562629	-1.72289	0.084908	0.330072
Plesiomonas shigelloides	16.87903	-1.30556	0.758963	-1.72019	0.085397	0.330506
Streptomyces sp. SirexAA-E	59.06379	-0.81697	0.475657	-1.71755	0.085878	0.330608
Aquitalea magnusonii	57.3426	-0.85124	0.495508	-1.71792	0.085811	0.330608
Brachyspira hampsonii	5.189282	2.877292	1.674272	1.718533	0.085699	0.330608
Neisseria sp. 10023	44.81292	-1.14256	0.664789	-1.71869	0.085671	0.330608
Thermosediminibacter oceani	4.045599	-2.04143	1.187201	-1.71953	0.085518	0.330608
Burkholderia sp. HB1	608.3306	-1.08623	0.632858	-1.71639	0.08609	0.331075
Rhodothermus marinus	64.47594	-0.9479	0.552607	-1.71533	0.086285	0.331466
Arcobacter halophilus	10.5169	2.642819	1.541592	1.714344	0.086465	0.331466
Halomonas sp. 1513	50.38649	-0.93112	0.543065	-1.71457	0.086423	0.331466
Acidovorax sp. 1608163	598.3842	-0.98229	0.573653	-1.71234	0.086835	0.331915

Pedobacter steynii	21.35733	-1.49969	0.875878	-1.71222	0.086856	0.331915
Burkholderiales bacterium YL45	5.363077	-2.68214	1.566183	-1.71253	0.086798	0.331915
Thioalkalivibrio versutus	31.28903	-1.07675	0.629129	-1.71149	0.086991	0.33208
Francisella noatunensis	1.769746	4.941168	2.890389	1.709516	0.087355	0.332774
Streptomyces sp. Go-475	77.40561	-0.81543	0.47693	-1.70975	0.087313	0.332774
Pseudomonas soli	3.148022	-3.72023	2.189719	-1.69895	0.089328	0.333467
Vibrio gazogenes	6.958964	-2.13919	1.262473	-1.69444	0.090182	0.333467
Pseudoalteromonas spongiae	14.81151	2.175774	1.278147	1.702288	0.088701	0.333467
Sphingopyxis fribergensis	62.17913	-0.93851	0.553226	-1.69643	0.089804	0.333467
Idiomarina sp. OT37-5b	5.270016	-2.41382	1.416987	-1.70349	0.088476	0.333467
Asticcacaulis excentricus	33.76747	-1.21921	0.714306	-1.70685	0.08785	0.333467
Rhizobium leguminosarum	381.3384	-0.67838	0.397191	-1.70793	0.087649	0.333467
Altererythrobacter atlanticus	27.1061	-1.03671	0.611322	-1.69585	0.089915	0.333467
Acinetobacter sp. TTH0-4	34.13915	1.187238	0.700296	1.695336	0.090012	0.333467
Burkholderia sp. IDO3	319.6481	-0.98781	0.581014	-1.70016	0.089101	0.333467
Chryseobacterium sp. 6424	18.15334	-1.4977	0.878423	-1.70499	0.088196	0.333467
Spirosoma aerolatum	20.28975	-1.25531	0.739071	-1.6985	0.089414	0.333467
Altererythrobacter ishigakiensis	7.097296	-1.7836	1.04706	-1.70344	0.088486	0.333467
Nitrospirillum amazonense	171.3197	-0.88595	0.522006	-1.69721	0.089657	0.333467
Streptococcus himalayensis	14.17712	-1.54536	0.912236	-1.69404	0.090258	0.333467
Hymenobacter sedentarius	78.85991	-0.83707	0.491497	-1.7031	0.08855	0.333467
Mycolicibacterium hassiacum	162.0379	-0.60957	0.358222	-1.70166	0.08882	0.333467
Oblitimonas alkaliphila	6.548464	-2.15778	1.268081	-1.70161	0.088828	0.333467
Verrucomicrobia bacterium IMCC26134	32.95982	-0.91876	0.542706	-1.69292	0.090471	0.333467
Streptococcus uberis	16.85216	-1.36234	0.804223	-1.69398	0.090269	0.333467
Rummeliibacillus stabekisii	6.376656	-2.25501	1.331369	-1.69376	0.090312	0.333467
Thauera aromatica	95.77581	-0.95535	0.56416	-1.6934	0.090379	0.333467
Euzebyella marina	4.275071	-2.33699	1.373013	-1.70209	0.088739	0.333467
Streptococcus macedonicus	3.824052	-3.99985	2.353802	-1.69931	0.08926	0.333467
Pseudomonas syringae	321.8453	-0.77556	0.455668	-1.70202	0.088751	0.333467
Synechococcus sp. SynAce01	15.0754	-1.22256	0.718839	-1.70074	0.088992	0.333467
Sedimenticola thiotaurini	17.09337	-1.33826	0.785344	-1.70404	0.088373	0.333467
Micromonospora coriariae	60.71929	-0.87931	0.517221	-1.70007	0.089118	0.333467
Sanguibacter keddieii	151.1403	-0.68433	0.402232	-1.70134	0.088879	0.333467
Neosaxia chiangmaiensis	37.27862	-1.08412	0.640305	-1.69313	0.09043	0.333467
Burkholderia contaminans	425.4124	-0.92636	0.543127	-1.7056	0.088083	0.333467
Pseudomonas oryzae	113.6496	-1.00423	0.593	-1.69347	0.090367	0.333467
Sphingobium sp. TKS	66.15204	-0.91007	0.538116	-1.69121	0.090797	0.333952
Lysobacter capsici	157.9632	-1.08637	0.642876	-1.68986	0.091055	0.333952
Streptomyces globosus	74.53419	-0.70564	0.417582	-1.68983	0.091061	0.333952
Vibrio coralliilyticus	19.36378	-1.29465	0.766013	-1.69011	0.091006	0.333952
Bacillus circulans	26.78644	1.223305	0.723289	1.691307	0.090778	0.333952
Agrobacterium sp. RAC06	69.1265	-0.93883	0.556662	-1.68654	0.091692	0.335252
Desulfomonile tiedjei	4.408938	-2.36218	1.400193	-1.68704	0.091596	0.335252
Saccharomonospora marina	110.7646	-0.77023	0.456642	-1.68673	0.091655	0.335252
Halothiobacillus sp. LS2	23.40389	-1.08099	0.641213	-1.68585	0.091825	0.335402
Micromonospora echinofusca	77.24417	-0.72249	0.429455	-1.68235	0.092501	0.337532
Mesorhizobium sp. WSM1497	35.99058	-2.29904	1.368575	-1.67988	0.092981	0.338944
Neorhizobium sp. SOG26	37.67182	-0.83983	0.500809	-1.67695	0.093551	0.340681
Burkholderia sp. MSMB0852	32.21953	-1.65609	0.987852	-1.67646	0.093648	0.340692

<i>Spiroplasma helicoides</i>	5.067401	3.671999	2.191229	1.675771	0.093783	0.340842
<i>Desulfovibrio vulgaris</i>	91.49673	-0.79337	0.473837	-1.67436	0.094061	0.34151
<i>Arcobacter marinus</i>	12.31441	1.919232	1.146693	1.67371	0.094188	0.341629
<i>Micromonospora purpureochromogenes</i>	82.9032	-0.69616	0.41639	-1.67188	0.094547	0.342593
<i>Gemmobacter</i> sp. HYN0069	41.78205	-0.92206	0.551687	-1.67135	0.094653	0.342635
<i>Streptomyces anulatus</i>	65.88789	-0.71011	0.425092	-1.67049	0.094823	0.342907
<i>Brevibacillus brevis</i>	25.14961	-1.00465	0.602229	-1.66822	0.095272	0.344192
<i>Actinomadura amylolytica</i>	111.5583	-0.73764	0.44233	-1.66763	0.095389	0.344272
<i>Halomonas</i> sp. N3-2A	3.027319	-3.66377	2.199166	-1.66598	0.095717	0.345114
<i>Microbulbifer agarilyticus</i>	20.40405	-0.95346	0.573224	-1.66332	0.096248	0.346682
<i>Pelobacter acetylenicus</i>	12.74956	-1.1572	0.696817	-1.66069	0.096776	0.34824
<i>Clostridium taeniosporum</i>	21.15987	1.476696	0.89132	1.656752	0.09757	0.350403
<i>Bradyrhizobium</i> sp. S23321	290.8588	-0.83183	0.501944	-1.65722	0.097475	0.350403
<i>Pseudomonas cichorii</i>	41.96608	-1.16441	0.703227	-1.65581	0.097761	0.350745
<i>Achromobacter</i> sp. MFA1 R4	141.032	-0.8812	0.532593	-1.65455	0.098015	0.351309
<i>Clostridium argentinense</i>	30.78684	1.102099	0.666612	1.653285	0.098273	0.351541
<i>Desulfatibacillum alkenivorans</i>	28.40075	-1.03919	0.628457	-1.65356	0.098217	0.351541
<i>Magnetospirillum gryphiswaldense</i>	407.169	-0.99977	0.605016	-1.65247	0.098439	0.351714
<i>Porphyrobacter</i> sp. LM 6	31.68737	-1.07939	0.653531	-1.65162	0.098612	0.351714
<i>Tannerella forsythia</i>	159.9991	-1.02113	0.61825	-1.65164	0.098608	0.351714
<i>Campylobacter lari</i>	19.62401	1.658072	1.00427	1.651023	0.098734	0.351736
<i>Pseudomonas</i> sp. R2A2	21.81279	-1.26962	0.769164	-1.65065	0.098811	0.351736
<i>Streptomyces lunaelactis</i>	57.73603	-0.81937	0.496539	-1.65017	0.098909	0.351741
<i>Lysobacter gummosus</i>	88.95343	-1.02089	0.619677	-1.64746	0.099463	0.353367
<i>Methylobacter mobilis</i>	8.340136	-1.37126	0.83286	-1.64645	0.099671	0.35376
<i>Chitinophaga pinensis</i>	51.19293	-0.92734	0.564357	-1.64317	0.100347	0.354445
<i>Saccharomonospora cyanea</i>	110.1474	-0.86234	0.524654	-1.64363	0.100252	0.354445
<i>Streptomyces</i> sp. SM18	65.62044	-0.76987	0.468298	-1.64397	0.100183	0.354445
<i>Runella</i> sp. HYN0085	10.24613	-1.60106	0.974846	-1.64237	0.100512	0.354445
<i>Singulisphaera acidiphila</i>	62.67654	-0.82351	0.501263	-1.64286	0.100412	0.354445
<i>Nocardia</i> sp. CFHS0054	168.8619	-0.50176	0.305539	-1.64221	0.100546	0.354445
<i>Sinorhizobium</i> sp. CCBAU 05631	6.244487	-2.40599	1.462711	-1.64488	0.099994	0.354445
<i>Streptomyces</i> sp. Tue 6075	40.86685	-1.21335	0.740272	-1.63906	0.1012	0.356061
<i>Achromobacter insolitus</i>	119.0166	-0.74118	0.452188	-1.63909	0.101194	0.356061
<i>Agrobacterium fabrum</i>	55.90565	-0.84975	0.519345	-1.63619	0.101799	0.357821
<i>Desulfuromonas soudanensis</i>	49.56787	-0.91674	0.560611	-1.63526	0.101996	0.358166
<i>Thermotoga caldifontis</i>	4.149385	-2.92396	1.789882	-1.6336	0.102342	0.359036
<i>Dinoroseobacter shibae</i>	60.84419	-0.89443	0.54821	-1.63154	0.102776	0.359894
<i>Acidovorax</i> sp. KKS102	1336.223	-0.78816	0.483087	-1.6315	0.102785	0.359894
<i>Pandoraea faecigallinarum</i>	171.7452	-0.83797	0.513932	-1.63051	0.102994	0.36028
<i>Corynebacterium resistens</i>	1930.986	-0.71319	0.437709	-1.62937	0.103234	0.360428
<i>Rhodobacter</i> sp. CZR27	108.0556	-0.78106	0.479268	-1.62969	0.103166	0.360428
<i>Pseudomonas guangdongensis</i>	41.95308	-0.92456	0.567782	-1.62837	0.103446	0.36082
<i>Anaerolinea thermophila</i>	5.107616	-1.6331	1.003773	-1.62696	0.103745	0.360955
<i>Microbulbifer aggregans</i>	13.39669	-1.45815	0.895928	-1.62753	0.103625	0.360955
<i>Proteiniphilum saccharofermentans</i>	17.44108	-1.46191	0.898719	-1.62665	0.103811	0.360955
<i>Prauserella marina</i>	79.87909	-0.52504	0.322842	-1.62631	0.103884	0.360955
<i>Aggregatibacter aphrophilus</i>	148.299	-1.04548	0.643037	-1.62586	0.10398	0.360955
<i>Desulfovibrio gigas</i>	25.5026	-0.95413	0.587291	-1.62462	0.104244	0.361523
<i>Akkermansia muciniphila</i>	78.52703	-1.51398	0.932543	-1.62349	0.104484	0.361668

<i>Vibrio breoganii</i>	3.784774	-2.81028	1.730698	-1.62378	0.104422	0.361668
<i>Starkeya novella</i>	108.578	-0.75465	0.464983	-1.62295	0.1046	0.361725
<i>Bacillus lehensis</i>	12.81958	-1.37484	0.847945	-1.62137	0.104937	0.362547
<i>Agrococcus carbonis</i>	135.5621	-0.69688	0.430045	-1.62047	0.10513	0.36287
<i>Brevirhabdus pacifica</i>	52.19418	-0.86573	0.534484	-1.61975	0.105286	0.363062
<i>Sphingobacterium</i> sp. 21	34.24445	-0.98819	0.610958	-1.61744	0.105784	0.36333
<i>Immundisolibacter cernigliae</i>	96.92124	-0.74176	0.458369	-1.61825	0.105608	0.36333
<i>Amycolatopsis albisporea</i>	168.1831	-0.58643	0.362649	-1.61707	0.105863	0.36333
<i>Macrococcus canis</i>	20.41141	1.7139	1.059468	1.617699	0.105727	0.36333
<i>Massilia</i> sp. YMA4	256.2995	-0.78763	0.486974	-1.6174	0.105792	0.36333
<i>Amycolatopsis orientalis</i>	74.90351	-0.63974	0.396053	-1.61529	0.106247	0.364304
<i>Nostocales cyanobacterium</i> HT-58-2	16.6328	1.686077	1.044392	1.614411	0.106438	0.364399
<i>Fluoribacter dumoffii</i>	3.142758	-3.21958	1.994483	-1.61424	0.106475	0.364399
<i>Actinomyces</i> sp. Z16	199.2993	-0.66098	0.409675	-1.61342	0.106654	0.36467
<i>Geobacter daltonii</i>	9.168766	-1.42662	0.885225	-1.6116	0.10705	0.365679
<i>Algoriphagus</i> sp. M8-2	4.222434	-2.2265	1.384474	-1.6082	0.107792	0.367203
<i>Phaeobacter piscinae</i>	23.32903	-1.27198	0.790951	-1.60817	0.107799	0.367203
<i>Kosakonia oryzae</i>	136.0034	-0.82895	0.51529	-1.6087	0.107682	0.367203
<i>Microbacterium</i> sp. PAMC 28756	174.9743	-0.77389	0.482079	-1.60531	0.108425	0.36725
<i>Microbacterium</i> sp. TPU 3598	160.516	-0.68776	0.42823	-1.60605	0.108263	0.36725
<i>Sulfitobacter pseudonitzschiae</i>	25.04862	-1.16383	0.724092	-1.6073	0.10799	0.36725
<i>Eggerthella lenta</i>	49.42604	-0.67458	0.41977	-1.60701	0.108051	0.36725
<i>Pectobacterium carotovorum</i>	91.11551	-0.92166	0.574286	-1.60488	0.108519	0.36725
<i>Methylophilus</i> sp. TWE2	17.27466	-1.62969	1.014455	-1.60646	0.108172	0.36725
<i>Acidovorax</i> sp. JS42	1362.053	-0.94357	0.587788	-1.60528	0.108431	0.36725
<i>Neorhizobium galegae</i>	93.96859	-0.78399	0.488748	-1.60408	0.108697	0.367508
<i>Synechococcus</i> sp. NIES-970	6.400466	-1.88724	1.17718	-1.60319	0.108892	0.367828
<i>Pseudoalteromonas piscicida</i>	5.38558	2.40795	1.503241	1.601838	0.109191	0.368348
<i>Reinekea forsetii</i>	5.135402	-2.1062	1.315076	-1.60158	0.109249	0.368348
<i>Beggiatoa leptomitiformis</i>	10.36463	-1.45861	0.911355	-1.60049	0.109491	0.368822
<i>Massilia putida</i>	422.0878	-0.78573	0.491425	-1.59888	0.109847	0.369679
<i>Pelagibacterium halotolerans</i>	38.05828	-0.78326	0.490129	-1.59807	0.110027	0.369942
<i>Mycobacteroides saopaulense</i>	72.65984	-0.87854	0.550078	-1.59711	0.11024	0.370318
<i>Pseudomonas monteilli</i>	217.6945	-0.88309	0.554493	-1.5926	0.111249	0.371876
<i>Parageobacillus genomosp.</i> 1	4.104493	-2.31793	1.455102	-1.59296	0.111168	0.371876
<i>Eikenella corrodens</i>	90.71553	-0.83443	0.524039	-1.5923	0.111317	0.371876
<i>Pseudodesulfovibrio aespoeensis</i>	33.72004	-1.04847	0.658343	-1.59259	0.111252	0.371876
<i>Lachnospiraceae bacterium</i> GAM79	143.35	-1.14362	0.717637	-1.5936	0.111027	0.371876
<i>Lactobacillus brevis</i>	13.33234	-1.6977	1.065976	-1.59263	0.111244	0.371876
<i>Brachyspira hyodysenteriae</i>	15.55796	1.93982	1.219651	1.590472	0.111729	0.372907
<i>Rhodoferax saidenbachensis</i>	275.4861	-0.89161	0.560837	-1.58978	0.111885	0.373016
<i>Haloferax mediterranei</i>	2.729456	-2.73528	1.720936	-1.58942	0.111966	0.373016
<i>Hyphomicrobium</i> sp. MC1	32.35748	-1.31598	0.828423	-1.58853	0.112166	0.373341
<i>Pseudomonas</i> sp. TCU-HL1	54.11325	-0.83792	0.527729	-1.58778	0.112336	0.373564
<i>Serratia ficaria</i>	122.1843	-1.03652	0.654015	-1.58485	0.113	0.373723
<i>Rhodobacter sphaeroides</i>	312.4519	-0.78144	0.492751	-1.58587	0.112768	0.373723
<i>Mycobacterium</i> sp. MS1601	159.6257	-0.5218	0.329076	-1.58566	0.112817	0.373723
<i>Cellulophaga lytica</i>	12.65222	1.727769	1.089992	1.585122	0.112939	0.373723
<i>Pelagibaca abyssii</i>	60.13212	-0.80957	0.510577	-1.58559	0.112832	0.373723
<i>Erwinia persicina</i>	54.58028	-1.20794	0.761764	-1.58571	0.112805	0.373723

<i>Erythrobacter gangjinensis</i>	20.94506	-1.03121	0.651388	-1.58309	0.113401	0.374029
<i>Cronobacter condimenti</i>	16.49018	-1.78419	1.12688	-1.5833	0.113353	0.374029
<i>Azospirillum lipoferum</i>	180.9168	-0.72178	0.455727	-1.58379	0.113242	0.374029
<i>Coxiella burnetii</i>	8.73263	-2.02282	1.278155	-1.58261	0.113511	0.374052
<i>Thiobacillus denitrificans</i>	62.67963	-0.83253	0.526333	-1.58176	0.113705	0.374353
<i>Pseudomonas</i> sp. HLS-6	28.46201	-0.87347	0.552673	-1.58045	0.114004	0.374998
<i>Nonomurea</i> sp. ATCC 55076	240.9809	-0.60928	0.385657	-1.57984	0.114143	0.375114
<i>Natronolimnobius aegyptiacus</i>	20.19118	-1.46901	0.930422	-1.57886	0.114368	0.375514
<i>Gardnerella vaginalis</i>	384.4255	0.998573	0.633347	1.576661	0.114874	0.376835
<i>Deferribacter desulfuricans</i>	8.206502	2.402321	1.524703	1.575599	0.115118	0.377012
<i>Actinomyces hongkongensis</i>	467.4825	-0.77562	0.492291	-1.57553	0.115135	0.377012
<i>Actinoalloteichus</i> sp. GBA129-24	26.58332	-3.3897	2.153126	-1.57432	0.115415	0.377588
<i>Cytophagales bacterium</i> TFI 002	4.304183	-1.70654	1.085419	-1.57224	0.115894	0.378477
<i>Arcobacter butzleri</i>	15.8714	1.934537	1.230432	1.572242	0.115894	0.378477
<i>Deinococcus</i> sp. S14-83	18.20075	-1.0873	0.691772	-1.57176	0.116006	0.378503
<i>Mycolicibacterium phlei</i>	1447.373	-0.86308	0.549437	-1.57084	0.116219	0.378519
<i>Chthonomonas calidirosea</i>	10.95512	-1.64392	1.046471	-1.57092	0.116202	0.378519
<i>Maritalea myrionectae</i>	11.17543	-1.42282	0.906211	-1.57007	0.116398	0.378762
<i>Cellvibrio japonicus</i>	14.20651	-1.10963	0.707056	-1.56936	0.116563	0.378799
<i>Bradyrhizobium</i> sp. BTAi1	286.921	-0.82023	0.52288	-1.56868	0.116722	0.378799
<i>Thermobacillus composti</i>	47.73105	-1.03735	0.661165	-1.56897	0.116655	0.378799
<i>Flavobacterium pallidum</i>	3.818577	-2.69548	1.720971	-1.56625	0.117289	0.380302
<i>Staphylococcus pasteurii</i>	6970.929	-0.76426	0.488305	-1.56513	0.117553	0.380561
<i>Delftia</i> sp. HK171	187.8111	-0.93384	0.596699	-1.56502	0.117579	0.380561
<i>Altererythrobacter namhicola</i>	41.34189	-0.80035	0.511753	-1.56395	0.11783	0.381037
<i>Chromatiaceae bacterium</i> 2141T.STBD.0c	40.40899	-0.6863	0.439021	-1.56325	0.117994	0.381226
<i>Streptococcus mitis</i>	3692.679	-0.85252	0.546252	-1.56067	0.118602	0.382627
<i>Sphingobium</i> sp. EP60837	26.00183	-1.14948	0.736603	-1.56052	0.118638	0.382627
<i>Aggregatibacter segnis</i>	148.3305	-0.93743	0.601092	-1.55955	0.118866	0.38266
<i>Novosphingobium resinovorum</i>	153.0016	-0.73384	0.471184	-1.55744	0.119367	0.38266
<i>Sphingobium</i> sp. SCG-1	47.84156	-0.78817	0.506089	-1.55736	0.119384	0.38266
<i>Pedobacter</i> sp. eg	34.4689	-1.09622	0.703788	-1.5576	0.119329	0.38266
<i>Leptospira interrogans</i>	13.26394	2.091515	1.342244	1.558222	0.119181	0.38266
<i>Thermobaculum terrenum</i>	5.468874	-1.87052	1.200982	-1.55749	0.119354	0.38266
<i>Streptomyces autolyticus</i>	36.88389	-1.76864	1.134111	-1.5595	0.118879	0.38266
<i>Thermoanaerobacter kivui</i>	6.362067	-2.75357	1.769408	-1.55621	0.119658	0.3832
<i>Akkermansia glycaniphila</i>	15.62095	-1.51634	0.974714	-1.55568	0.119784	0.383268
<i>Streptomyces vietnamensis</i>	79.25955	-0.70702	0.455291	-1.5529	0.120446	0.385047
<i>Rhizobium</i> sp. NXC24	40.60618	-0.90604	0.58376	-1.55208	0.120643	0.385336
<i>Paenibacillus graminis</i>	4.333952	-2.30153	1.484685	-1.55018	0.121098	0.386452
<i>Candidatus Methylopusillus turicensis</i>	2.858122	-2.50039	1.61438	-1.54882	0.121424	0.387153
<i>Alcanivorax pacificus</i>	45.48716	-1.10068	0.711463	-1.54707	0.121846	0.388158
<i>Lacinutrix</i> sp. Bg11-31	9.869357	1.832459	1.184956	1.546437	0.121999	0.388305
<i>Victivallales bacterium</i> CCUG 44730	22.55591	-0.93706	0.606975	-1.54381	0.122634	0.388991
<i>Mycolicibacterium chubuense</i>	196.642	-0.82615	0.535149	-1.54378	0.122642	0.388991
<i>Aquimarina</i> sp. BL5	16.0016	1.423632	0.921615	1.544715	0.122415	0.388991
<i>Brevundimonas naejangsanensis</i>	328.4524	-0.74862	0.48468	-1.54457	0.122451	0.388991
<i>Aeromicrobium erythreum</i>	175.2971	-0.67526	0.437722	-1.54267	0.12291	0.389161
<i>Kyrpidia tusciae</i>	15.52271	-1.72442	1.117688	-1.54285	0.122868	0.389161
<i>Trichodesmium erythraeum</i>	17.36313	1.463185	0.950454	1.539459	0.123692	0.391016

<i>Shingomonas hengshuiensis</i>	145.6016	-0.77324	0.502304	-1.53938	0.123711	0.391016
<i>Acidithiobacillus caldus</i>	21.81237	-1.02088	0.663708	-1.53814	0.124014	0.391634
<i>Arachidococcus</i> sp. BS20	38.70675	-0.92313	0.601178	-1.53554	0.124651	0.393304
<i>Salinicola tamaricis</i>	76.61274	-0.79713	0.520082	-1.53271	0.125348	0.394839
<i>Wenzhouxiangella marina</i>	40.12075	-0.72644	0.473968	-1.53268	0.125354	0.394839
<i>Streptomyces lydicus</i>	175.4628	-0.47984	0.313271	-1.5317	0.125596	0.395257
<i>Erythrobacter flavus</i>	39.08294	-0.95721	0.6254	-1.53056	0.125878	0.395664
<i>Kitasatospora</i> sp. MMS16-BH015	115.604	-0.67053	0.438167	-1.5303	0.125942	0.395664
<i>Pectobacterium atrosepticum</i>	14.84305	-1.56766	1.024711	-1.52985	0.126053	0.395668
<i>Terriglobus saanensis</i>	37.12489	-1.00132	0.654916	-1.52894	0.12628	0.395695
<i>Mycobacterium</i> sp. JS623	168.52	-0.55562	0.363507	-1.5285	0.126388	0.395695
Lachnospiraceae bacterium Choco86	60.27843	-1.11406	0.728761	-1.5287	0.126339	0.395695
<i>Mycolicibacterium fortuitum</i>	22.81722	-1.31797	0.862736	-1.52767	0.126595	0.396005
<i>Actinoalloteichus</i> sp. AHMU CJ021	275.6765	0.745431	0.488394	1.526291	0.126938	0.396734
<i>Corynebacterium humireducens</i>	933.676	-0.44286	0.29026	-1.52572	0.127079	0.396837
<i>Muribaculum intestinale</i>	21.7964	-1.51672	0.994839	-1.52459	0.127361	0.397375
<i>Microbacterium</i> sp. LKL04	114.331	-0.72522	0.476687	-1.52138	0.128166	0.398178
<i>Desulfitobacterium hafniense</i>	5.89717	-1.85722	1.220147	-1.52213	0.127977	0.398178
<i>Paracoccus mutanolyticus</i>	79.83753	-0.73598	0.483607	-1.52186	0.128044	0.398178
<i>Bacillus cereus</i>	723.8069	0.664877	0.436879	1.521877	0.12804	0.398178
<i>Bifidobacterium animalis</i>	68.67708	-0.68448	0.449788	-1.52177	0.128066	0.398178
<i>Pseudodesulfovibrio indicus</i>	49.63254	-0.78608	0.516921	-1.52069	0.128337	0.398371
<i>Pseudomonas</i> sp. PONIH3	27.58468	-2.05264	1.350616	-1.51978	0.128565	0.398739
<i>Mesoplasma florum</i>	14.75998	2.357706	1.558028	1.513264	0.130213	0.398769
<i>Synechococcus</i> sp. RCC307	16.17561	-1.43386	0.946407	-1.51505	0.129759	0.398769
<i>Bifidobacterium angulatum</i>	41.0549	-1.0886	0.719562	-1.51286	0.130315	0.398769
<i>Erythrobacter litoralis</i>	102.894	-0.7789	0.514414	-1.51414	0.12999	0.398769
<i>Actinobacillus porcitonisillarum</i>	9.958205	-1.73302	1.144046	-1.51482	0.129819	0.398769
<i>Vagococcus teuberi</i>	9.70085	-1.36898	0.90222	-1.51735	0.129179	0.398769
<i>Beijerinckia indica</i>	19.71834	-1.05417	0.694123	-1.51871	0.128837	0.398769
<i>Weissella jogaejeotgali</i>	6.217357	-1.91357	1.263625	-1.51435	0.129937	0.398769
<i>Nonlabens marinus</i>	3.667307	-2.39458	1.582114	-1.51353	0.130144	0.398769
<i>Andersenella</i> sp. Alg231-50	15.96214	-0.84686	0.558355	-1.51671	0.12934	0.398769
<i>Corynebacterium maris</i>	898.6322	-0.44341	0.292242	-1.51728	0.129195	0.398769
<i>Sulfitobacter</i> sp. JL08	11.1737	-1.66106	1.097999	-1.51281	0.130329	0.398769
<i>Pandoravirus dulcis</i>	2.151771	-3.17569	2.095585	-1.51542	0.129666	0.398769
<i>Pseudomonas</i> sp. LH1G9	21.03186	-1.52484	1.005038	-1.5172	0.129216	0.398769
<i>Croceicoccus naphthovorans</i>	90.32162	-0.95121	0.627643	-1.51553	0.129637	0.398769
<i>Komagataeibacter medellinensis</i>	16.36747	-1.36649	0.901385	-1.51599	0.129522	0.398769
<i>Wigglesworthia glossinidia</i>	5.241512	2.412767	1.595489	1.512243	0.130472	0.398871
<i>Komagataeibacter nataicola</i>	30.73407	-1.19373	0.790027	-1.511	0.130788	0.399503
<i>Klebsiella</i> sp. FDAARGOS_511	6.736426	-1.4398	0.953252	-1.51041	0.130939	0.399628
<i>Bacteroidales bacterium CF</i>	4.117773	-2.24153	1.485939	-1.50849	0.131429	0.400451
<i>Plautia stali symbiont</i>	45.78714	-1.11607	0.739733	-1.50874	0.131365	0.400451
<i>Thermoanaerobacterium thermosacchar</i>	27.05684	1.75315	1.164107	1.506004	0.132066	0.401384
<i>Streptomyces</i> sp. SCSIO 03032	101.43	-0.70028	0.464988	-1.50602	0.132062	0.401384
<i>Neisseria polysaccharea</i>	37.68036	-1.19458	0.792857	-1.50667	0.131894	0.401384
<i>Ensifer adhaerens</i>	150.9668	-0.64018	0.425389	-1.50492	0.132344	0.401582
<i>Staphylococcus sciuri</i>	92.07115	0.72469	0.482148	1.503044	0.132828	0.401582
<i>Geobacillus thermodenitrificans</i>	3.50674	-3.87507	2.578003	-1.50313	0.132806	0.401582

<i>Sphingomonas</i> sp. NIC1	160.1681	-0.84872	0.564778	-1.50275	0.132904	0.401582
<i>Microcystis aeruginosa</i>	5.264293	-2.53568	1.686258	-1.50373	0.13265	0.401582
<i>Streptomyces katrae</i>	62.94547	-0.7145	0.47496	-1.50433	0.132496	0.401582
<i>Pseudomonas aeruginosa</i>	3462.355	-0.7492	0.498246	-1.50368	0.132663	0.401582
<i>Actinoplanes missouriensis</i>	191.094	-0.64036	0.426278	-1.50222	0.133041	0.401663
<i>Pseudomonas poae</i>	64.963	-1.09784	0.731034	-1.50177	0.133157	0.401678
<i>Salinimonas</i> sp. N102	3.13673	-2.57639	1.716443	-1.50101	0.133354	0.40194
<i>Legionella hackeliae</i>	4.074964	-2.23985	1.493073	-1.50016	0.133573	0.402267
<i>Blastomonas</i> sp. RAC04	33.9244	-1.10925	0.740239	-1.4985	0.134003	0.403187
<i>Pantoea</i> sp. PSNIH2	4.2871	-4.1604	2.777066	-1.49813	0.1341	0.403187
<i>Streptococcus</i> sp. NPS 308	707.6592	-0.83443	0.557181	-1.49759	0.13424	0.403274
<i>Streptomyces clavuligerus</i>	79.32055	-0.72165	0.48204	-1.49708	0.134373	0.403342
<i>Halopiger xanaduensis</i>	21.74257	-1.2732	0.851137	-1.49588	0.134685	0.403943
<i>Streptomyces lincolnensis</i>	71.87436	-0.83706	0.56023	-1.49413	0.135141	0.404052
<i>Chloracidobacterium thermophilum</i>	13.06259	-1.21038	0.81	-1.4943	0.135097	0.404052
<i>Mannheimia haemolytica</i>	5.611204	-1.71445	1.147526	-1.49404	0.135165	0.404052
<i>Bordetella hinzii</i>	134.713	-0.81384	0.544572	-1.49446	0.135056	0.404052
<i>Cronobacter dublinensis</i>	14.49568	-1.21387	0.814543	-1.49025	0.136158	0.406165
<i>Pseudovibrio</i> sp. FO-BEG1	8.058859	-1.26201	0.846947	-1.49007	0.136207	0.406165
<i>Denitrobacterium detoxificans</i>	14.02252	-1.46856	0.985195	-1.49063	0.136059	0.406165
<i>Amycolatopsis</i> sp. AA4	129.3631	-0.59814	0.401682	-1.48909	0.136464	0.406598
<i>Chloroflexus aurantiacus</i>	7.831384	-1.62727	1.093998	-1.48745	0.136896	0.407551
<i>Celeribacter indicus</i>	66.02351	-0.69839	0.469912	-1.48622	0.137222	0.408188
<i>Bordetella</i> sp. HZ20	18.09669	-0.89215	0.601413	-1.48342	0.137962	0.409972
<i>Desulfurobacterium thermolithotrophum</i>	3.639186	-2.34415	1.581022	-1.48268	0.13816	0.409972
<i>Phaeobacter gallaeciensis</i>	66.38695	-0.72288	0.487524	-1.48276	0.138138	0.409972
<i>Phaeobacter porticola</i>	8.666329	-1.65456	1.117885	-1.48008	0.138852	0.410808
<i>Rhodococcus fascians</i>	428.6191	1.017459	0.68742	1.480113	0.138843	0.410808
<i>Streptomyces malaysiensis</i>	34.10801	-1.38944	0.938301	-1.48081	0.138658	0.410808
<i>Streptococcus oralis</i>	4626.866	-0.79895	0.539858	-1.47992	0.138893	0.410808
<i>Streptomyces hygrosopicus</i>	297.5371	-0.69216	0.468155	-1.47848	0.139279	0.411591
<i>Blattabacterium punctulatus</i>	3.457677	-3.85484	2.60799	-1.47809	0.139384	0.411591
<i>Streptomyces</i> sp. 3214.6	71.30662	-0.73259	0.495836	-1.47749	0.139544	0.411729
<i>Pelodictyon phaeoclathratiforme</i>	2.565901	-2.55964	1.735449	-1.47492	0.140235	0.413097
<i>Runella slithyformis</i>	12.57428	-1.38751	0.940634	-1.47508	0.14019	0.413097
<i>Aggregatibacter actinomycetemcomitans</i>	15.1415	-1.59073	1.079068	-1.47417	0.140436	0.413355
<i>Pasteurella multocida</i>	491.5084	-0.73913	0.502195	-1.4718	0.141074	0.414896
<i>Saccharomonospora viridis</i>	72.03617	-0.64217	0.436821	-1.47011	0.141533	0.415911
<i>Pseudomonas syringae</i> group genomsp.	68.52804	-1.46683	0.99821	-1.46946	0.141708	0.415971
<i>Sphaerochaeta pleomorpha</i>	3.507212	-1.91779	1.30534	-1.46919	0.141782	0.415971
<i>Thermobifida fusca</i>	54.52161	-0.6077	0.413876	-1.46831	0.14202	0.416331
<i>Rhodothermaceae bacterium</i> RA	40.58339	-1.39098	0.948161	-1.46703	0.142368	0.417018
<i>Pseudomonas trivialis</i>	86.96475	-0.73636	0.50277	-1.46461	0.143027	0.417937
<i>Sphingopyxis</i> sp. MG	13.75232	-2.6408	1.802789	-1.46484	0.142965	0.417937
<i>Mariniflexile</i> sp. TRM1-10	13.74779	1.53343	1.046554	1.465217	0.142862	0.417937
<i>Shewanella</i> sp. ANA-3	4.650979	-2.21176	1.511465	-1.46332	0.143379	0.418293
<i>Micromonospora inositola</i>	83.63449	-0.67862	0.463655	-1.46363	0.143294	0.418293
<i>Truepera radiovictrix</i>	41.16298	-0.79983	0.546825	-1.46267	0.143557	0.418477
<i>Bacillus amyloliquefaciens</i>	5.961546	-2.30692	1.578767	-1.46121	0.143957	0.418931
<i>Clostridium cellulovorans</i>	24.28007	0.958575	0.656206	1.460783	0.144075	0.418931

<i>Caulobacter segnis</i>	159.911	-0.80967	0.55441	-1.46043	0.144173	0.418931
<i>Neisseria zoodegmatis</i>	34.15242	-0.97855	0.669622	-1.46134	0.143922	0.418931
<i>Magnetospirillum magneticum</i>	77.23386	-0.78708	0.539176	-1.45979	0.144348	0.419106
<i>Caldithrix abyssi</i>	3.47438	-2.01198	1.379176	-1.45883	0.144612	0.419537
<i>Weeksella virosa</i>	18.92034	-1.85796	1.276263	-1.45578	0.145454	0.421642
<i>Peptoclostridium acidaminophilum</i>	5.975631	-1.85002	1.274073	-1.45205	0.146487	0.423287
<i>Actinobacteria bacterium IMCC26256</i>	4.264456	-2.01364	1.386444	-1.45238	0.146397	0.423287
<i>Yersinia rohdei</i>	4.155273	-2.1635	1.489712	-1.45229	0.14642	0.423287
<i>Hirschia baltica</i>	1.725429	-2.85972	1.969227	-1.4522	0.146445	0.423287
<i>Aeromicrobium marinum</i>	124.3441	-0.71484	0.493763	-1.44775	0.147688	0.423911
<i>Streptomyces</i> sp. 3211	37.14771	-0.74009	0.510791	-1.44891	0.147364	0.423911
<i>Bacillus infantis</i>	9.335975	-1.35895	0.938654	-1.44777	0.147683	0.423911
<i>Nocardioides</i> sp. JS614	270.9308	-0.70799	0.489247	-1.4471	0.147868	0.423911
<i>Micromonospora krabiensis</i>	116.7286	-0.71142	0.491326	-1.44796	0.147629	0.423911
<i>Micromonospora narathiwatensis</i>	57.31809	-0.76368	0.527221	-1.4485	0.147477	0.423911
<i>Roseibacterium elongatum</i>	39.11939	-0.84219	0.581909	-1.4473	0.147814	0.423911
<i>Mycolicibacter terrae</i>	75.49085	-0.54159	0.373634	-1.44951	0.147194	0.423911
<i>Jonquetella anthropi</i>	48.97074	-1.21424	0.837998	-1.44898	0.147344	0.423911
<i>Pseudomonas antarctica</i>	115.7211	-0.87771	0.606225	-1.44782	0.147666	0.423911
<i>Yersinia similis</i>	2.968483	-2.49285	1.724079	-1.4459	0.148205	0.424542
<i>Gilliamella apicola</i>	17.34115	1.355503	0.938287	1.444657	0.148554	0.425209
<i>Stackebrandtia nassauensis</i>	108.2195	-0.46143	0.319966	-1.44214	0.149263	0.426314
<i>Jeotgalibaca dankookensis</i>	6.542669	-1.60255	1.111139	-1.44226	0.14923	0.426314
<i>Streptomyces scabiei</i>	75.52939	-0.59167	0.4103	-1.44204	0.149292	0.426314
<i>Gemmatimonas aurantiaca</i>	53.20161	-0.71107	0.493265	-1.44156	0.149428	0.426367
<i>Defluviimonas alba</i>	110.8579	-0.82093	0.570139	-1.43988	0.149901	0.426379
<i>Plantibacter</i> sp. PA-3-X8	174.0809	-0.74229	0.515448	-1.44008	0.149845	0.426379
<i>Serratia</i> sp. 3ACOL1	2.421462	3.616059	2.509194	1.441123	0.14955	0.426379
<i>Streptomyces cavourensis</i>	15.79052	-1.5531	1.078401	-1.44019	0.149813	0.426379
<i>Staphylococcus condimenti</i>	61.98481	0.827058	0.57456	1.439464	0.150019	0.426382
<i>Halomonas hydrothermalis</i>	39.5451	-0.89187	0.620301	-1.4378	0.150491	0.427239
<i>Pseudomonas azotoformans</i>	140.881	-0.88899	0.618542	-1.43724	0.15065	0.427239
<i>Nitrosomonas eutropha</i>	6.126468	-1.60363	1.116157	-1.43675	0.15079	0.427239
<i>Rhodococcus</i> sp. YL-1	129.2982	-1.05019	0.730897	-1.43685	0.150761	0.427239
<i>Thioalkalivibrio</i> sp. K90mix	25.3627	-0.87772	0.611482	-1.4354	0.151174	0.427356
<i>Gordonia polyisoprenivorans</i>	342.2178	-0.62465	0.435186	-1.43536	0.151184	0.427356
<i>Actinoplanes</i> sp. N902-109	145.0974	-0.6411	0.446406	-1.43613	0.150966	0.427356
<i>Micropruina glycogenica</i>	170.0668	-0.54671	0.38127	-1.43391	0.151597	0.427632
<i>Mycobacterium avium</i>	255.0214	-0.63352	0.441616	-1.43454	0.151417	0.427632
<i>Kangiella koreensis</i>	3.122941	-2.63945	1.840898	-1.43378	0.151634	0.427632
<i>Pseudoalteromonas atlantica</i>	12.68825	-2.26272	1.579115	-1.43291	0.151885	0.427741
<i>Ezakiella massiliensis</i>	571.3083	0.710018	0.495538	1.432824	0.151908	0.427741
<i>Acinetobacter</i> sp. SWBY1	166.8579	-1.31852	0.921635	-1.43063	0.152537	0.429179
<i>Olsenella uli</i>	62.07051	-0.82695	0.578678	-1.42904	0.152992	0.430128
<i>Streptomyces</i> sp. HNM0039	48.35967	-0.68026	0.476282	-1.42827	0.153214	0.430418
<i>Catenulispora acidiphila</i>	121.0724	-0.66217	0.46415	-1.42663	0.153685	0.430452
<i>Nocardioides</i> sp. CF8	282.1017	-0.73682	0.516494	-1.42659	0.153699	0.430452
<i>Arcanobacterium haemolyticum</i>	64.38764	-0.66876	0.468382	-1.42781	0.153346	0.430452
<i>Desulfarculus baarsii</i>	45.14044	-0.81766	0.572978	-1.42703	0.153571	0.430452
<i>Streptococcus pseudopneumoniae</i>	546.3913	-0.87904	0.61743	-1.42372	0.154529	0.432314

Pimelobacter simplex	235.7532	-0.60583	0.425729	-1.42305	0.154721	0.432314
Methylobacterium sp. 4-46	173.9763	-0.67873	0.47683	-1.42343	0.154612	0.432314
Campylobacter hyointestinalis	4.745509	2.433028	1.711941	1.42121	0.155256	0.433144
Sphingorhabdus flavimaris	16.43679	-1.07654	0.757275	-1.42159	0.155145	0.433144
Leifsonia sp. 21MFCrub1.1	216.7935	-0.7569	0.533106	-1.41979	0.155669	0.433964
Lactobacillus sakei	35.9199	-1.07254	0.756507	-1.41775	0.156263	0.435288
Candidatus Puniceispirillum marinum	3.616058	-1.86348	1.31833	-1.41352	0.157504	0.438407
Fibrella aestuarina	43.89011	-1.02256	0.724684	-1.41104	0.158233	0.439225
Mycolicibacterium rutilum	165.4134	-0.47219	0.334406	-1.41202	0.157945	0.439225
Erythrobacter sp. YH-07	23.62689	-1.07117	0.759473	-1.41042	0.158417	0.439225
Caldilinea aerophila	17.79206	-0.94503	0.670203	-1.41006	0.158522	0.439225
Microbacterium chocolatum	158.5408	-0.75945	0.538321	-1.41077	0.158312	0.439225
Pseudopedobacter saltans	26.90762	-1.08227	0.767502	-1.41012	0.158504	0.439225
Pajaroellobacter abortibovis	2.286728	-3.24481	2.302157	-1.40946	0.158698	0.439378
Azoarcus communis	157.6845	-0.72611	0.515425	-1.40875	0.158908	0.439626
Coriobacterium glomerans	20.91048	-1.06672	0.757438	-1.40833	0.159034	0.43964
Shewanella sp. M2	7.943657	-2.01381	1.43192	-1.40637	0.159615	0.439936
Pseudomonas sp. NC02	95.49023	-1.04451	0.7431	-1.40561	0.159839	0.439936
Methylocella silvestris	51.33165	-0.88128	0.626712	-1.4062	0.159663	0.439936
Pseudomonas sp. MYb193	86.826	-0.87192	0.620716	-1.40471	0.160109	0.439936
Tatumella citrea	12.06048	-1.13769	0.809532	-1.40536	0.159914	0.439936
Altererythrobacter sp. B11	52.40961	-0.75072	0.534412	-1.40476	0.160093	0.439936
Clostridium sp. JN-1	17.09185	1.272592	0.905407	1.405547	0.159859	0.439936
Streptomyces sp. 2323.1	74.05311	-0.66375	0.471916	-1.4065	0.159575	0.439936
Planococcus sp. Y42	25.92695	1.359727	0.968431	1.404052	0.160303	0.440139
Methylomonas denitrificans	18.7122	-1.12217	0.799609	-1.4034	0.160497	0.440338
Rhodocyclaceae bacterium	52.53297	-0.96371	0.687549	-1.40166	0.161016	0.441428
Cylindrospermum stagnale	3.086043	-2.23788	1.597951	-1.40047	0.161373	0.4418
Deinococcus puniceus	39.48774	-0.81146	0.579451	-1.4004	0.161394	0.4418
Rhodobacteraceae bacterium	7.452796	-1.41588	1.012171	-1.39885	0.161857	0.44207
Corynebacterium glyciniphilum	472.4967	-0.66374	0.474384	-1.39916	0.161765	0.44207
Bacillus paralicheniformis	15.47695	-1.41855	1.01352	-1.39963	0.161624	0.44207
Austwickia chelonae	63.93355	-0.62024	0.443618	-1.39813	0.162073	0.442327
Acidovorax ebreus	914.8676	-0.89807	0.642741	-1.39725	0.162339	0.44239
Leisingera methylohalidivorans	33.73402	-0.8082	0.578403	-1.3973	0.162323	0.44239
Nitrobacter winogradskyi	43.35834	-0.87344	0.626191	-1.39485	0.16306	0.443914
Spiroplasma litorale	2.57646	3.240006	2.323285	1.394579	0.163143	0.443914
Aerococcus christensenii	54.18105	-0.94521	0.678419	-1.39326	0.163541	0.444666
Mycoplasma capricolum	2.471411	3.516212	2.526954	1.391483	0.164079	0.444799
Stenotrophomonas sp. Pemsol	36.89535	-0.87425	0.627854	-1.39244	0.163788	0.444799
Arcobacter cryaerophilus	11.09761	1.840272	1.321984	1.392053	0.163906	0.444799
Marinovum algicola	58.81083	-0.79071	0.56809	-1.39187	0.163962	0.444799
Fusobacterium ulcerans	9.89486	1.467837	1.055207	1.391042	0.164213	0.44483
Amycolatopsis methanolica	140.6791	-0.54526	0.392612	-1.38879	0.164897	0.446297
Propionimicrobium sp. Marseille-P3275	163.968	-0.72334	0.521366	-1.3874	0.165321	0.446297
Pseudomonas salegens	20.76501	-0.89306	0.643767	-1.38724	0.165368	0.446297
Bacillus sonorensis	9.365089	-1.0169	0.732568	-1.38813	0.165098	0.446297
Deinococcus proteolyticus	167.0675	0.903382	0.650894	1.38791	0.165165	0.446297
Celeribacter manganoxidans	42.0459	-0.8101	0.584215	-1.38665	0.165547	0.44645
Streptococcus sp. Z15	5.687028	-1.62316	1.172046	-1.3849	0.166085	0.446513

Luteimonas sp. 100111	86.01518	-0.78769	0.56856	-1.38541	0.165929	0.446513
Lactobacillus apis	11.80287	2.537043	1.83152	1.385212	0.165988	0.446513
Grimontia hollisae	3.370998	-2.05065	1.481144	-1.38451	0.166204	0.446513
Sphingobium japonicum	38.14332	-0.95771	0.6919	-1.38417	0.166307	0.446513
Tumebacillus algifaecis	7.449483	-1.31566	0.949413	-1.38576	0.165819	0.446513
Streptococcus sp. ChDC B345	1280.076	-0.89768	0.649694	-1.3817	0.167064	0.447322
Paenibacillus sabinae	17.6766	-1.22337	0.885483	-1.38158	0.1671	0.447322
Lactobacillus acetotolerans	4.04866	-2.72171	1.969653	-1.38182	0.167026	0.447322
Cryobacterium sp. GCJ02	90.3907	-0.7595	0.549609	-1.38189	0.167007	0.447322
Aeromicrobium sp. 592	216.8297	-0.69408	0.502527	-1.38117	0.167226	0.44733
Sebaldella termitidis	13.15585	1.42838	1.034516	1.380723	0.167364	0.44737
Nostoc sp. PCC 7107	7.108959	-2.19559	1.591391	-1.37967	0.167689	0.44791
Thermomonospora curvata	102.9473	-0.64707	0.46925	-1.37894	0.167914	0.44818
Roseburia hominis	90.34015	-1.12233	0.814193	-1.37845	0.168063	0.448251
Cobetia marina	34.65311	-0.94937	0.68928	-1.37733	0.16841	0.448846
Methanosarcina mazei	10.33459	2.125815	1.545099	1.375843	0.16887	0.449743
Polaribacter sp. BM10	3.668209	3.341081	2.43062	1.37458	0.169262	0.450457
Tumebacillus avium	27.27793	-0.89298	0.649922	-1.37398	0.169448	0.450624
Streptococcus gallolyticus	9.671654	-1.55657	1.13332	-1.37346	0.169609	0.45072
Oceanithermus profundus	66.81201	-0.66744	0.486323	-1.37243	0.16993	0.451245
halophilic archaeon DL31	3.835051	-2.01028	1.465424	-1.37181	0.170123	0.451428
Hungateiclostridium clariflavum	14.53361	-1.08574	0.791834	-1.37117	0.170322	0.451627
Salinibacter ruber	29.62257	-0.83975	0.613221	-1.36941	0.17087	0.451758
Magnetospirillum sp. XM-1	68.74627	-0.72622	0.53005	-1.3701	0.170655	0.451758
Aeromonas schubertii	21.70778	-0.85147	0.621959	-1.36902	0.170993	0.451758
Sphingomonas panacis	165.7168	-0.78685	0.574485	-1.36967	0.17079	0.451758
Streptococcus parasanguinis	1655.378	-0.81556	0.595504	-1.36953	0.170833	0.451758
Brochothrix thermosphacta	311.7704	1.247567	0.911816	1.368222	0.171243	0.45209
Janthinobacterium svalbardensis	118.4549	-0.68316	0.499685	-1.36717	0.171571	0.452629
Nitrosococcus halophilus	16.11078	-0.8838	0.646982	-1.36603	0.171929	0.452916
Mycolicibacter sinensis	99.71662	-0.59852	0.438066	-1.36628	0.171851	0.452916
Thermus parvatiensis	2.456795	-3.36447	2.464498	-1.36517	0.172198	0.453297
Rhodobacter capsulatus	68.53574	-0.8028	0.588546	-1.36404	0.172554	0.453906
Arsenicococcus sp. oral taxon 190	217.9951	-0.56496	0.414506	-1.36298	0.172889	0.454458
Salinispira pacifica	3.104442	-2.33289	1.713246	-1.36168	0.1733	0.455211
Streptococcus halotolerans	10.70163	-1.40837	1.035163	-1.36053	0.173663	0.455504
Pseudomonas agarici	43.29298	-0.78703	0.578374	-1.36077	0.173587	0.455504
Desulfotomaculum nigrificans	6.462946	-1.5066	1.10932	-1.35813	0.174424	0.456221
Shimwellia blattae	860.1553	-1.61168	1.18673	-1.35808	0.174437	0.456221
Corynebacterium xerosis	779.4126	-0.54221	0.399141	-1.35845	0.174322	0.456221
Kutzneria albida	169.0952	-0.44567	0.328016	-1.35867	0.174251	0.456221
Enterococcus durans	10.71591	-1.49541	1.103957	-1.35459	0.175548	0.458797
Vibrio scophthalmi	17.91297	-1.65849	1.22627	-1.35247	0.176226	0.460237
Actinobacteria bacterium IMCC25003	5.737364	-1.68594	1.247312	-1.35166	0.176484	0.460579
Gammaproteobacteria bacterium DM2	3.725334	-2.15862	1.599474	-1.34958	0.17715	0.461986
Deinococcus wulumuqiensis	585.4156	-0.79583	0.590759	-1.34713	0.177937	0.462383
Bifidobacterium pseudolongum	44.29696	-0.65245	0.484119	-1.34771	0.177751	0.462383
Gammapapillomavirus 15	15.35194	-2.15047	1.594688	-1.34852	0.177492	0.462383
Xanthomonas cassavae	67.66888	-0.81134	0.602107	-1.34751	0.177816	0.462383
Pseudomonas sp. ATCC 13867	92.00048	-0.6104	0.452967	-1.34757	0.177797	0.462383

Martellella sp. AD-3	64.88344	-0.826	0.613945	-1.34541	0.178494	0.463499
Morganella morganii	24.87002	-1.1767	0.876421	-1.34262	0.179395	0.465038
Pseudopropionibacterium propionicum	347.3519	-0.74622	0.556054	-1.34199	0.179598	0.465038
Petrimonas mucosa	18.39504	-1.18045	0.879573	-1.34208	0.179572	0.465038
Rhodococcus qingshengii	107.4869	-1.60943	1.198709	-1.34264	0.179389	0.465038
Roseobacter denitrificans	8.906736	-1.22444	0.913767	-1.33999	0.180249	0.465439
Faecalitalea cylindroides	50.66969	-1.09909	0.819783	-1.34071	0.180015	0.465439
Yangia sp. CCB-MM3	78.8124	-0.59738	0.445761	-1.34014	0.180199	0.465439
Streptomyces avermitilis	49.83058	-0.61485	0.458868	-1.33994	0.180265	0.465439
Staphylococcus aureus	41773.23	0.951074	0.710572	1.338462	0.180746	0.46635
Methylophaga nitratreducenticrescens	2.884178	-2.14722	1.608442	-1.33497	0.181886	0.467056
Archaeoglobus veneficus	3.84057	-1.94465	1.454703	-1.3368	0.181287	0.467056
Marinobacter sp. es.042	14.21935	-1.14075	0.853084	-1.33721	0.181155	0.467056
Stanieria cyanosphaera	7.295935	1.965052	1.47209	1.334872	0.181918	0.467056
Streptomyces puniscabiei	65.24967	-0.50514	0.378296	-1.3353	0.181777	0.467056
Cellulomonas sp. PSBB021	131.526	-0.5739	0.42956	-1.33602	0.181544	0.467056
Enterobacter hormaechei	94.64144	-1.21767	0.911583	-1.33578	0.181622	0.467056
Pseudomonas sp. MRSN12121	25.08864	-1.43075	1.072411	-1.33414	0.182157	0.467339
Pedobacter sp. PACM 27299	14.67225	-1.26943	0.95209	-1.3333	0.182432	0.467716
Methylovorus glucosotrophus	10.31124	-1.51218	1.13543	-1.33181	0.182922	0.468163
Desulfallas gibsoniae	7.542768	-1.357	1.018856	-1.33188	0.182898	0.468163
Prevotella enoeca	123.9329	-0.77071	0.578788	-1.3316	0.182993	0.468163
Paracoccus yeei	1032.3	-0.80908	0.608247	-1.33018	0.183458	0.469025
Psychrobacter sp. DAB_AL43B	19.60735	-1.31882	0.992914	-1.32823	0.184102	0.469705
Microvirga sp. 17 mud 1-3	58.90435	-0.65068	0.489761	-1.32856	0.183994	0.469705
Streptomyces sp. 4F	56.52752	-0.73939	0.556688	-1.3282	0.184112	0.469705
Oceanisphaera profunda	4.597922	-1.75706	1.323561	-1.32752	0.184336	0.469948
Acinetobacter johnsonii	424.2008	-0.74319	0.560227	-1.32659	0.184646	0.470407
Bacillus smithii	6.130459	-1.59233	1.201459	-1.32533	0.185062	0.471138
Pseudomonas psychrophila	82.8616	-0.76861	0.581224	-1.3224	0.186036	0.472954
Sideroxydans lithotrophicus	51.19056	-0.78417	0.592868	-1.32267	0.185944	0.472954
Actinoalloteichus sp. AD1127-7	3.315727	-3.79327	2.87073	-1.32136	0.186381	0.473501
Cellulomonas flavigena	120.049	-0.6618	0.501185	-1.32046	0.186681	0.473933
Streptomyces sp. 2114.2	2.754571	-3.52682	2.672227	-1.31981	0.1869	0.474157
Propionibacterium phage PAC1	18.72886	-1.99744	1.516155	-1.31744	0.187692	0.475835
Limnobaculum parvum	8.652402	-1.27842	0.97072	-1.31698	0.187844	0.475888
Staphylococcus virus SEP9	107.0409	2.299168	1.747757	1.315496	0.188343	0.476821
Rhizobium sp. 11515TR	69.59405	-0.73804	0.561531	-1.31434	0.188732	0.477474
Octadecabacter arcticus	7.855219	-1.25181	0.953135	-1.31336	0.189063	0.477979
Zhihengliuella sp. ISTPL4	114.407	-0.55906	0.426567	-1.31059	0.189995	0.478245
Coralloccoccus coralloides	121.8942	-0.73705	0.561787	-1.31197	0.189529	0.478245
Luteimonas sp. 83-4	96.95985	-0.67703	0.516374	-1.31113	0.189813	0.478245
Stenotrophomonas acidaminiphila	196.9742	-0.62999	0.480477	-1.31117	0.1898	0.478245
Corynebacterium ureicelerivorans	11336.12	-0.71276	0.544217	-1.3097	0.190298	0.478245
Neisseria gonorrhoeae	33.95886	-1.24742	0.95284	-1.30916	0.190481	0.478245
Streptomyces coelicolor	21.69228	-2.12492	1.62191	-1.31013	0.190151	0.478245
Lactococcus sp. 1JSPR-7	3.849008	-1.75652	1.341586	-1.30928	0.190438	0.478245
Streptococcus sp. oral taxon 431	898.0551	-0.85579	0.652593	-1.31137	0.189732	0.478245
Bacillus litoralis	23.22759	-1.00858	0.770404	-1.30915	0.190483	0.478245
Blastococcus saxobsidens	229.3941	-0.6274	0.480034	-1.307	0.191213	0.478434

<i>Altererythrobacter dongtanensis</i>	46.95291	-0.68029	0.520037	-1.30816	0.190818	0.478434
<i>Arcobacter bivalviorum</i>	9.190749	1.638944	1.253396	1.307603	0.191008	0.478434
<i>Parasaccharibacter apium</i>	12.39909	-1.33052	1.017507	-1.30762	0.191001	0.478434
<i>Aeromonas veronii</i>	62.28356	-0.63427	0.485291	-1.30699	0.191216	0.478434
<i>Propionibacterium virus SKKY</i>	15.43086	-1.78346	1.365374	-1.3062	0.191483	0.478774
<i>Haliangium ochraceum</i>	181.017	-0.59119	0.452794	-1.30565	0.191673	0.478919
<i>Paenibacillus polymyxa</i>	112.5299	1.058582	0.811203	1.304952	0.191909	0.47918
<i>Algibacter alginicyliticus</i>	8.947162	1.320333	1.012794	1.303654	0.192352	0.479955
<i>Sulfitobacter</i> sp. SK011	13.40609	-1.23064	0.945568	-1.30149	0.193092	0.480485
<i>Ketogulonicigenium vulgare</i>	30.68701	-0.86819	0.666917	-1.3018	0.192986	0.480485
<i>Streptomyces chartreusis</i>	68.15836	-0.69204	0.531658	-1.30166	0.193032	0.480485
<i>Clostridium carboxidivorans</i>	19.22412	1.048755	0.80569	1.301686	0.193024	0.480485
<i>Gynuella sunshinyii</i>	4.16487	-1.68763	1.297228	-1.30095	0.193275	0.480612
<i>Corynebacterium mycetoides</i>	2086.245	-0.48685	0.3744	-1.30034	0.193486	0.480806
<i>Pseudomonas thivervalensis</i>	31.17718	-1.09068	0.839336	-1.29946	0.193786	0.480857
<i>Zymomonas mobilis</i>	16.20191	-0.99203	0.763452	-1.29941	0.193805	0.480857
<i>Solimonas</i> sp. K1W22B-7	122.3893	-0.71591	0.551071	-1.29912	0.193903	0.480857
<i>Acinetobacter</i> sp. WCHA45	87.97641	0.830122	0.639605	1.297868	0.194333	0.481596
[<i>Mannheimia</i>] <i>succiniciproducens</i>	4.549968	-2.21618	1.708795	-1.29692	0.194657	0.482071
<i>Natrinema</i> sp. J7-2	7.477352	-1.6266	1.255164	-1.29593	0.195001	0.482593
<i>Halomonas</i> sp. HL-93	6.507057	-2.81638	2.174486	-1.2952	0.195253	0.482889
<i>Vibrio mimicus</i>	3.127178	-2.55273	1.97192	-1.29454	0.195479	0.48312
<i>Devosia</i> sp. H5989	63.23899	-0.55595	0.429801	-1.29351	0.195836	0.483345
<i>Tamlana</i> sp. UJ94	5.383932	2.682052	2.073233	1.293657	0.195784	0.483345
<i>Planctopirus limnophila</i>	4.148962	-1.56398	1.214565	-1.28769	0.197855	0.48339
<i>Gramella flava</i>	4.68196	-1.70007	1.318856	-1.28905	0.19738	0.48339
<i>Microvirga ossetica</i>	133.309	-0.6681	0.516853	-1.29263	0.196138	0.48339
<i>Corynebacterium halotolerans</i>	1266.555	-0.33265	0.257799	-1.29035	0.196929	0.48339
<i>Rufibacter tibetensis</i>	15.91245	-0.94671	0.735404	-1.28733	0.19798	0.48339
<i>Spiroplasma cantharicola</i>	3.563623	2.937292	2.279197	1.28874	0.197489	0.48339
<i>Hahella chejuensis</i>	16.33761	-0.82148	0.638047	-1.2875	0.197921	0.48339
<i>Microvirgula aerodenitrificans</i>	84.26935	-0.72275	0.561032	-1.28825	0.197659	0.48339
<i>Corynebacterium</i> sp. 2183	1220.317	-0.33872	0.262527	-1.29025	0.196965	0.48339
<i>Aquiflexum balticum</i>	11.11605	-1.23548	0.959303	-1.28789	0.197785	0.48339
<i>Shewanella woodyi</i>	4.300665	-1.85176	1.432692	-1.2925	0.196184	0.48339
<i>Bacteroides thetaiotaomicron</i>	133.2673	-0.69323	0.53841	-1.28754	0.197905	0.48339
<i>Haematospirillum jordaniae</i>	3.309951	-1.94535	1.511	-1.28746	0.197934	0.48339
<i>Acetoanaerobium sticklandii</i>	17.59538	-0.89561	0.694026	-1.29046	0.196892	0.48339
<i>Halorubrum trapanicum</i>	36.85602	-0.885	0.686507	-1.28913	0.197354	0.48339
<i>Mycoplasma fermentans</i>	2.695805	2.992052	2.316603	1.291569	0.196506	0.48339
<i>Stenotrophomonas</i> sp. ESTM1D_MKCIP4_	46.20282	-0.66392	0.516415	-1.28564	0.19857	0.484506
<i>Shewanella benthica</i>	1.92249	-2.25335	1.754299	-1.28447	0.198977	0.484911
<i>Enterobacter</i> sp. 638	23.48699	-1.41434	1.101499	-1.28402	0.199136	0.484911
<i>Agromyces</i> sp. 30A	90.9686	-0.58754	0.457459	-1.28436	0.199015	0.484911
<i>Streptomyces davaonensis</i>	67.38277	-0.55222	0.430655	-1.28227	0.199746	0.485789
<i>Tessaracoccus</i> sp. T2.5-30	127.9709	-0.55018	0.42908	-1.28223	0.199764	0.485789
<i>Geodermatophilus obscurus</i>	292.6087	-0.67986	0.531314	-1.27957	0.200695	0.487729
<i>Shewanella</i> sp. FDAARGOS_354	13.30108	1.383904	1.083355	1.277425	0.201452	0.489118
<i>Micromonospora zamorensis</i>	64.38884	-0.54411	0.42615	-1.27681	0.201671	0.489118
<i>Frankia alni</i>	98.2108	-0.6138	0.480696	-1.2769	0.201636	0.489118

<i>Polaribacter vadi</i>	10.23221	1.614551	1.265032	1.276292	0.201852	0.489233
<i>Deinococcus ficus</i>	69.41816	-0.6726	0.527415	-1.27527	0.202213	0.489781
<i>Mannheimia</i> sp. USDA-ARS-USMARC-126	3.404922	-2.338	1.834532	-1.27444	0.202507	0.490168
<i>Parabacteroides distasonis</i>	70.49027	-1.39564	1.096415	-1.27291	0.20305	0.490596
<i>Sphingobium</i> sp. SYK-6	84.76941	-0.4974	0.390575	-1.27351	0.202836	0.490596
<i>Acinetobacter junii</i>	225.9786	-0.69076	0.54271	-1.2728	0.203089	0.490596
<i>Pragia fontium</i>	2.579386	-1.90838	1.502371	-1.27025	0.203996	0.491705
<i>Bacillus coagulans</i>	13.90044	-0.78393	0.616841	-1.27088	0.203771	0.491705
<i>Rhodovulum sulfidophilum</i>	72.90301	-0.72859	0.573695	-1.26999	0.204088	0.491705
<i>Aeromonas dhakensis</i>	4.995763	-1.88616	1.484321	-1.27072	0.203827	0.491705
<i>Paracoccus</i> sp. SC2-6	141.9544	-0.67737	0.533786	-1.269	0.204442	0.492229
<i>Vibrio furnissii</i>	9.492429	-1.22843	0.969236	-1.26742	0.205006	0.493262
<i>Paenibacillus beijingensis</i>	12.07497	-0.90879	0.718849	-1.26423	0.206146	0.495678
<i>Rhodococcus biphenylivorans</i>	112.1182	-1.41657	1.121662	-1.26292	0.206619	0.496158
<i>Lentibacillus amyloliquefaciens</i>	7.539801	-1.18501	0.938129	-1.26316	0.206532	0.496158
<i>Microbacterium</i> sp. Y-01	204.3947	-0.62936	0.49854	-1.2624	0.206805	0.496277
<i>Shewanella</i> sp. WE21	12.96449	-1.2835	1.01756	-1.26135	0.207183	0.49653
<i>Calothrix parietina</i>	12.08213	-1.50008	1.189113	-1.26151	0.207124	0.49653
<i>Haemophilus</i> sp. oral taxon 036	63.7453	-1.011	0.801761	-1.26097	0.20732	0.49653
<i>Nocardia brasiliensis</i>	274.8674	-0.39925	0.316871	-1.25997	0.20768	0.497067
<i>Nocardioides</i> sp. 603	222.7609	-0.52216	0.414559	-1.25954	0.207834	0.497107
<i>Treponema brennaborensis</i>	4.9014	-1.55408	1.23479	-1.25858	0.208183	0.497288
<i>Streptomyces</i> sp. CCM_MD2014	46.98279	-0.67336	0.534905	-1.25884	0.208087	0.497288
<i>Corynebacterium</i> sp. 2184	1473.024	-0.37733	0.300579	-1.25534	0.209357	0.498758
<i>Vibrio natriegens</i>	6.235702	-2.5736	2.051311	-1.25461	0.20962	0.498758
<i>Cnuibacter physcomitrellae</i>	207.6842	-0.74069	0.590556	-1.25423	0.209758	0.498758
<i>Streptomyces pluripotens</i>	58.70019	-0.60881	0.485391	-1.25427	0.209744	0.498758
<i>Streptococcus marmotae</i>	8.828842	-1.2821	1.021655	-1.25492	0.209507	0.498758
<i>Sphingobium chlorophenicum</i>	44.90604	-0.83482	0.664928	-1.2555	0.209297	0.498758
<i>Shewanella oneidensis</i>	2.849486	-2.96766	2.362696	-1.25605	0.209099	0.498758
<i>Altererythrobacter</i> sp. NS1	82.63247	-0.67798	0.541358	-1.25237	0.210436	0.499347
<i>Anoxybacillus flavithermus</i>	51.51324	-1.09784	0.876556	-1.25244	0.210409	0.499347
<i>Lactobacillus helveticus</i>	80.28939	-1.0764	0.859815	-1.2519	0.210608	0.499347
<i>Leclercia adecarboxylata</i>	43.36665	-1.79662	1.434466	-1.25247	0.2104	0.499347
<i>Hoyosella subflava</i>	83.47393	-0.58745	0.469339	-1.25166	0.210692	0.499347
<i>Streptomyces nodosus</i>	63.30756	-0.54873	0.438689	-1.25085	0.210989	0.499401
<i>Burkholderia thailandensis</i>	558.6745	-0.69897	0.558743	-1.25096	0.210948	0.499401
<i>Marmoricola scoriae</i>	325.8691	-0.52314	0.41891	-1.24882	0.211732	0.499824
<i>Oceanobacillus</i> sp. 160	5.885886	-1.68565	1.350292	-1.24836	0.211898	0.499824
<i>Halopenitus persicus</i>	9.400056	-1.19609	0.958324	-1.24811	0.211993	0.499824
<i>Psychrobacter</i> sp. AntiMn-1	26.15277	-1.19268	0.955052	-1.24881	0.211733	0.499824
<i>Methylobacterium curru</i>	135.3729	-0.57555	0.460902	-1.24875	0.211758	0.499824
<i>Ehrlichia ruminantium</i>	3.579978	3.094148	2.476207	1.249551	0.211463	0.499824
<i>Nocardioides</i> sp. 78	167.9322	-0.65984	0.528883	-1.24761	0.212176	0.499932
<i>Pseudarcicella</i> sp. HME7025	14.13247	-1.11563	0.894613	-1.24706	0.212376	0.500081
<i>Winogradskyella</i> sp. RHA_55	5.795058	-1.78537	1.433049	-1.24586	0.212817	0.500471
<i>Corynebacterium sphenisci</i>	386.3147	-0.41488	0.332983	-1.24595	0.212784	0.500471
<i>Rhodobacter</i> sp. LPB0142	92.09139	-0.65676	0.528147	-1.24352	0.213678	0.502152
<i>Carnobacterium inhibens</i>	14.04082	-0.98727	0.794161	-1.24316	0.213808	0.502152
<i>Klebsiella pneumoniae</i>	523.6375	0.52726	0.424344	1.24253	0.214041	0.502375

<i>Pantoea alhagi</i>	20.7442	-0.94665	0.762464	-1.24156	0.214399	0.502566
<i>Rathayibacter tritici</i>	82.04586	-0.62518	0.503533	-1.24158	0.21439	0.502566
<i>Streptomyces griseochromogenes</i>	71.83927	-0.69789	0.56379	-1.23786	0.215767	0.504107
<i>Microbacterium testaceum</i>	118.6332	-0.53082	0.428862	-1.23773	0.215815	0.504107
<i>Gordonia</i> sp. 1D	258.7029	-0.57711	0.465778	-1.23902	0.215337	0.504107
<i>Lactobacillus amylolyticus</i>	3.804422	-2.29149	1.851806	-1.23744	0.215925	0.504107
<i>Corynebacterium testudinis</i>	983.0053	-0.40944	0.330952	-1.23716	0.216026	0.504107
<i>Arthrobacter crystallopoietes</i>	151.1168	-0.46154	0.372814	-1.23799	0.21572	0.504107
<i>Streptomyces gilvosporeus</i>	87.64134	-0.472	0.381284	-1.23793	0.215744	0.504107
<i>Thiomicrospira aerophila</i>	5.935203	-1.86684	1.515159	-1.23211	0.217909	0.504974
<i>Microbacterium</i> sp. No. 7	264.9153	-0.56614	0.459394	-1.23236	0.217815	0.504974
<i>Sphingobium</i> sp. YG1	114.6589	-0.68474	0.555331	-1.23304	0.217562	0.504974
<i>Dietzia lutea</i>	1454.156	-0.80889	0.655973	-1.23311	0.217535	0.504974
<i>Gamma papillomavirus 11</i>	33.06983	1.895031	1.537069	1.232886	0.217618	0.504974
<i>Propionibacterium virus P144</i>	22.33976	1.742162	1.412694	1.23322	0.217494	0.504974
<i>Vibrio tapetis</i>	3.381637	-2.44735	1.984448	-1.23326	0.217478	0.504974
<i>Sphingomonas</i> sp. Cra20	119.8524	-0.69959	0.567031	-1.23378	0.217285	0.504974
<i>Synechococcus</i> sp. CC9605	17.2385	-1.30589	1.056993	-1.23547	0.216655	0.504974
<i>Brevundimonas</i> sp. GW460-12-10-14-LB2	325.8829	-0.65168	0.52893	-1.23207	0.217925	0.504974
<i>Yersinia aldovae</i>	2.97714	-1.88951	1.530937	-1.23422	0.217122	0.504974
<i>Pseudonocardia dioxanivorans</i>	192.6575	-0.48346	0.392714	-1.23107	0.218298	0.505195
<i>Sphingobium</i> sp. YBL2	67.59588	-0.74379	0.604121	-1.23119	0.218252	0.505195
<i>Pseudomonas mendocina</i>	424.2076	-0.72413	0.589952	-1.22744	0.219657	0.505432
<i>Salinispora arenicola</i>	39.80362	-0.65615	0.534486	-1.22763	0.219585	0.505432
<i>Pseudomonas sihuiensis</i>	58.21296	-0.55994	0.456088	-1.22771	0.219556	0.505432
<i>Nakamurella</i> sp. s14-144	38.2789	-0.68317	0.556212	-1.22826	0.21935	0.505432
<i>Flavobacterium</i> sp. CJ74	18.41253	-1.07805	0.879283	-1.22606	0.220177	0.505432
<i>Halorhodospira halochloris</i>	6.441646	-1.38979	1.131452	-1.22833	0.219325	0.505432
<i>Idiomarina loihiensis</i>	6.541659	-1.49062	1.212777	-1.22909	0.219036	0.505432
<i>Bibersteinia trehalosi</i>	8.049973	-1.31783	1.071726	-1.22964	0.218833	0.505432
<i>Streptococcus</i> sp. oral taxon 064	780.8899	-0.72616	0.591016	-1.22866	0.219199	0.505432
<i>Fibrobacter succinogenes</i>	7.725801	-1.1169	0.911027	-1.22598	0.220206	0.505432
<i>Candidatus Bipolaricaulis anaerobius</i>	4.872993	-1.62609	1.326324	-1.22602	0.220193	0.505432
<i>Jonesia denitrificans</i>	40.28468	-0.58735	0.477687	-1.22957	0.218858	0.505432
<i>Halioglobus japonicus</i>	13.3845	-0.8786	0.716023	-1.22706	0.219801	0.505432
<i>Microbacterium</i> sp. 10M-3C3	170.6426	-0.48805	0.398722	-1.22403	0.220943	0.506382
<i>Agromyces aureus</i>	119.8327	-0.55903	0.456647	-1.2242	0.220876	0.506382
<i>Trueperella pyogenes</i>	124.9683	-0.32903	0.268913	-1.22355	0.22112	0.506382
<i>Fusobacterium nucleatum</i>	496.5736	-0.55551	0.454066	-1.22341	0.221177	0.506382
<i>Ruegeria</i> sp. AD91A	12.44978	-1.18526	0.969249	-1.22286	0.221381	0.50653
<i>Staphylococcus</i> phage StB12	75.11767	0.957381	0.78334	1.222178	0.221641	0.506598
<i>Campylobacter hominis</i>	16.30385	-1.1684	0.956386	-1.22168	0.221828	0.506598
<i>Microcella alkaliphila</i>	84.2859	-0.53085	0.434517	-1.2217	0.221821	0.506598
[<i>Enterobacter</i>] <i>lignolyticus</i>	21.44221	-0.78284	0.641055	-1.22118	0.222019	0.506716
<i>Amycolatopsis keratiniphila</i>	112.3321	-0.50183	0.411232	-1.2203	0.222351	0.506838
<i>Yersinia ruckeri</i>	8.433607	-1.30653	1.070588	-1.22039	0.222319	0.506838
<i>Neisseria mucosa</i>	369.5458	-0.93192	0.764675	-1.21871	0.222953	0.506938
<i>Geminocystis</i> sp. NIES-3708	14.18361	1.193666	0.978738	1.219597	0.222618	0.506938
<i>Haemophilus haemolyticus</i>	198.4342	-0.75255	0.617361	-1.21898	0.222851	0.506938
<i>Alistipes shahii</i>	95.15295	-0.67687	0.555236	-1.21907	0.222816	0.506938

<i>Thalassospira xiamenensis</i>	16.05365	-0.78073	0.641161	-1.21768	0.223345	0.507513
<i>Oscillatoria acuminata</i>	2.70113	-2.08892	1.716549	-1.21693	0.223631	0.507588
<i>Streptomyces qaidamensis</i>	64.58409	-0.61379	0.504513	-1.2166	0.223757	0.507588
Enterobacteriaceae bacterium w17	2.059422	-3.10697	2.554035	-1.2165	0.223796	0.507588
<i>Micromonospora viridifaciens</i>	77.83662	-0.53316	0.43845	-1.21602	0.223977	0.507613
<i>Caldicellulosiruptor saccharolyticus</i>	6.615658	-1.91305	1.573577	-1.21573	0.224086	0.507613
<i>Vibrio anguillarum</i>	17.01305	1.147797	0.945187	1.21436	0.22461	0.508373
<i>Neisseria</i> sp. KEM232	80.15289	-0.62882	0.518082	-1.21375	0.224841	0.508373
<i>Pseudoalteromonas agarivorans</i>	2.400646	-3.32894	2.74244	-1.21386	0.2248	0.508373
<i>Dietzia</i> sp. oral taxon 368	5915.23	-0.7661	0.631519	-1.21311	0.22509	0.508619
<i>Intrasporangium calvum</i>	166.6742	-0.51241	0.422541	-1.2127	0.225246	0.508655
<i>Altererythrobacter epoxidivorans</i>	20.96323	-0.93082	0.769039	-1.21037	0.226136	0.50994
<i>Candidatus Nucleicultrix amoebiphila</i>	1.510949	-2.66091	2.199554	-1.20975	0.226375	0.50994
<i>Shewanella japonica</i>	3.088212	-2.42064	2.000046	-1.21029	0.226167	0.50994
<i>Marinobacter</i> sp. Arc7-DN-1	20.51358	-0.83907	0.693562	-1.2098	0.226354	0.50994
<i>Streptomyces</i> sp. ETH9427	42.48779	-0.65178	0.540121	-1.20674	0.227534	0.510534
<i>Humibacter</i> sp. BT305	231.4551	-0.64342	0.533774	-1.20542	0.228042	0.510534
<i>Leifsonia xyli</i>	278.5884	-0.47943	0.396685	-1.20858	0.226824	0.510534
<i>Aeromonas caviae</i>	24.92744	-1.40873	1.166778	-1.20737	0.227289	0.510534
<i>Tabrizicola</i> sp. K13M18	51.14698	-0.65571	0.543643	-1.20615	0.227761	0.510534
<i>Streptomyces</i> sp. RTd22	122.8612	-0.46168	0.382093	-1.20831	0.22693	0.510534
<i>Pantoea ananatis</i>	38.70233	-0.62821	0.520403	-1.20717	0.227367	0.510534
<i>Streptococcus equi</i>	59.19181	-0.72041	0.597403	-1.2059	0.227855	0.510534
<i>Cellulosimicrobium cellulans</i>	123.0118	-0.59679	0.494956	-1.20574	0.22792	0.510534
<i>Micromonospora tulbaghiaie</i>	66.52734	-0.72707	0.602621	-1.20651	0.22762	0.510534
<i>Rhodococcus</i> sp. P1Y	146.2682	0.536337	0.445574	1.203699	0.228706	0.510768
<i>Lutibacter profundus</i>	11.97098	1.142527	0.948867	1.204097	0.228552	0.510768
<i>Leuconostoc gelidum</i>	92.55287	-0.77222	0.641737	-1.20333	0.228849	0.510768
<i>Deinococcus soli</i> Cha et al. 2016	37.7251	-0.827	0.686579	-1.20452	0.22839	0.510768
<i>Leclercia</i> sp. LSNH1	11.30758	-1.5604	1.296594	-1.20346	0.228797	0.510768
<i>Mucilagibacter mallensis</i>	40.03396	-0.8102	0.673584	-1.20282	0.229045	0.510892
<i>Tessaracoccus aquimaris</i>	163.6911	-0.4179	0.347789	-1.2016	0.229517	0.511227
<i>Thermococcus pacificus</i>	3.676169	-2.2138	1.842514	-1.20151	0.229553	0.511227
<i>Niveispirillum cyanobacteriorum</i>	82.23331	-0.66496	0.553611	-1.20114	0.229698	0.511227
<i>Corynebacterium uterequi</i>	804.5438	-0.3548	0.295421	-1.20098	0.229757	0.511227
<i>Hungateiclostridium saccincola</i>	11.11172	1.157182	0.964342	1.19997	0.230151	0.51179
<i>Owenweeksia hongkongensis</i>	3.684997	-1.66741	1.39337	-1.19667	0.231433	0.512281
<i>Hymenobacter nivis</i>	65.32261	-0.66628	0.555972	-1.19841	0.230758	0.512281
<i>Aerococcus urinaehominis</i>	3.765306	-1.75539	1.468036	-1.19574	0.231797	0.512281
<i>Ketogulonicigenium robustum</i>	25.36697	-0.68813	0.575459	-1.1958	0.231774	0.512281
<i>Planctomyces</i> sp. SH-PL62	117.5707	-0.67612	0.5649	-1.19688	0.231352	0.512281
<i>Candidatus Saccharibacteria</i> oral taxon TI	52.05183	-0.90135	0.753961	-1.19549	0.231897	0.512281
<i>Hymenobacter</i> sp. DG25A	28.72505	0.818108	0.683711	1.19657	0.231474	0.512281
<i>Photobacterium gaetbulicola</i>	6.320813	-1.51461	1.267006	-1.19543	0.231921	0.512281
[<i>Eubacterium</i>] <i>hallii</i>	92.18346	-0.74384	0.620899	-1.19801	0.230913	0.512281
<i>Kineococcus radiotolerans</i>	129.6845	-0.54654	0.456185	-1.19807	0.230889	0.512281
<i>Serratia</i> sp. ATCC 39006	9.039923	-1.1409	0.952891	-1.1973	0.231189	0.512281
<i>Sphingopyxis</i> sp. EG6	67.09231	-0.67156	0.562071	-1.1948	0.232166	0.512512
<i>Arthrobacter</i> sp. DCT-5	149.2683	-0.52556	0.440359	-1.19347	0.232686	0.513348
<i>Bordetella genomosp.</i> 6	18.35488	-1.35241	1.134476	-1.1921	0.23322	0.514215

<i>Thermanaerovibrio acidaminovorans</i>	6.413884	-1.57213	1.319577	-1.19139	0.2335	0.514521
<i>Janthinobacterium</i> sp. LM6	211.0031	-0.72492	0.609687	-1.189	0.23444	0.516279
<i>Actinomyces oris</i>	6071.129	-0.59796	0.503318	-1.18803	0.234821	0.516804
<i>Sinorhizobium meliloti</i>	164.4478	-0.53097	0.447275	-1.18713	0.235177	0.517276
<i>Acetobacter aceti</i>	37.19963	-0.73698	0.621717	-1.1854	0.235861	0.517867
<i>Klebsiella oxytoca</i>	94.85533	-0.67227	0.567144	-1.18537	0.235873	0.517867
<i>Halorhodospira halophila</i>	26.49744	-0.79949	0.674388	-1.18551	0.235815	0.517867
<i>Methanobrevibacter ruminantium</i>	1.47113	3.20921	2.715753	1.181702	0.237324	0.520739
<i>Streptomyces</i> sp. FR-008	7.414266	-2.38972	2.023968	-1.18071	0.237717	0.521286
<i>Olsenella umbonata</i>	22.40427	-0.81704	0.69235	-1.18009	0.237964	0.521514
<i>Rhizobium etli</i>	184.9843	-0.58305	0.494582	-1.17887	0.23845	0.522264
<i>Pontibacter akesuensis</i>	24.82083	-0.80603	0.683999	-1.1784	0.238636	0.52235
<i>Corynebacterium marinum</i>	1035.94	-0.33075	0.280759	-1.17805	0.238776	0.52235
<i>Alteromonas mediterranea</i>	8.908826	-1.69645	1.441017	-1.17726	0.239091	0.522725
<i>Phenylobacterium</i> sp. HYN0004	74.37782	-0.68037	0.578162	-1.17678	0.239285	0.522834
<i>Lactobacillus gasseri</i>	131.5165	1.198447	1.019818	1.175157	0.239932	0.523305
<i>Maribacter cobaltidurans</i>	4.44087	-1.99912	1.701033	-1.17524	0.2399	0.523305
<i>Colwellia</i> sp. Arc7-D	5.105847	-1.77232	1.508041	-1.17525	0.239896	0.523305
<i>Planococcus antarcticus</i>	7.137307	-1.55759	1.326271	-1.17441	0.24023	0.523411
<i>Clostridium chauvoei</i>	16.57124	0.981778	0.836043	1.174316	0.240268	0.523411
<i>Actinosynnema pretiosum</i>	170.9416	-0.70577	0.601855	-1.17265	0.240935	0.524234
<i>Agrobacterium</i> sp. H13-3	2.576747	-3.42545	2.920301	-1.17298	0.240804	0.524234
<i>Francisella tularensis</i>	16.20369	1.507157	1.286235	1.171759	0.241294	0.524389
<i>Methylomonas</i> sp. DH-1	18.44363	-1.30524	1.113691	-1.17199	0.2412	0.524389
<i>Corynebacterium aquilae</i>	702.9915	-0.40278	0.344193	-1.17021	0.241917	0.524959
<i>Erythrobacter atlanticus</i>	13.84823	-1.10781	0.946603	-1.1703	0.241881	0.524959
<i>Carnobacterium</i> sp. CP1	7.142785	-1.25728	1.074572	-1.17003	0.241989	0.524959
<i>Treponema succinifaciens</i>	3.683235	1.87611	1.605153	1.168804	0.242483	0.525716
<i>Mucinivorans hirudinis</i>	4.650331	-1.52673	1.30738	-1.16778	0.242895	0.526297
<i>Hoefflea</i> sp. IMCC20628	30.39872	-0.7318	0.627275	-1.16664	0.243357	0.526983
<i>Anaeromyxobacter</i> sp. K	69.10475	-0.94239	0.808179	-1.16606	0.24359	0.527175
<i>Flavobacterium indicum</i>	9.949967	1.533707	1.317284	1.164295	0.244304	0.527543
<i>Lysinibacillus</i> sp. Marseille-P5727	29.80995	0.893203	0.766535	1.165249	0.243918	0.527543
<i>Saccharopolyspora erythraea</i>	155.1699	-0.41528	0.356798	-1.16392	0.244456	0.527543
<i>Propionibacterium</i> phage PA1-14	27.08	-1.56941	1.34847	-1.16385	0.244485	0.527543
<i>Streptomyces olivaceus</i>	73.4299	-0.63934	0.549226	-1.16408	0.244392	0.527543
<i>Veillonella rodentium</i>	92.63069	-0.67166	0.577593	-1.16286	0.244886	0.528093
<i>Arthrobacter</i> sp. FB24	159.0048	-0.49599	0.426657	-1.1625	0.245032	0.528096
<i>Lactobacillus zymae</i>	1.76401	-2.0722	1.784327	-1.16134	0.245505	0.52849
<i>Streptococcus pneumoniae</i>	2076.82	-0.62524	0.538366	-1.16137	0.24549	0.52849
<i>Micromonospora aurantiaca</i>	110.1438	-1.05536	0.909896	-1.15987	0.2461	0.529458
<i>Sinomonas atrocyanea</i>	246.7237	-0.54745	0.472301	-1.15912	0.246409	0.529809
<i>Corynebacterium geronticis</i>	549.1821	-0.42412	0.366366	-1.15764	0.247013	0.530651
<i>Tenacibaculum maritimum</i>	3.895894	2.276124	1.967123	1.157083	0.247239	0.530651
[<i>Mycobacterium</i>] <i>stephanolepidis</i>	50.08059	-0.69907	0.603989	-1.15742	0.247099	0.530651
<i>Methanosphaera stadtmanae</i>	5.173188	2.435157	2.106776	1.155869	0.247735	0.53109
<i>Lactobacillus acidipiscis</i>	2.72469	-2.16749	1.874643	-1.15622	0.247593	0.53109
<i>Salinisphaera</i> sp. LB1	36.37671	-0.61141	0.529809	-1.15402	0.24849	0.531268
<i>Olsenella</i> sp. Marseille-P2300	32.26595	-0.58764	0.509156	-1.15414	0.248443	0.531268
<i>Neomicrococcus aestuarii</i>	97.29909	-0.56933	0.493401	-1.15388	0.248548	0.531268

Streptococcus phage SpSL1	1.61991	-2.76305	2.394117	-1.1541	0.248459	0.531268
Barnesiella viscericola	57.19991	-0.86851	0.752623	-1.15398	0.248508	0.531268
Streptomyces noursei	50.1943	-0.66563	0.577038	-1.15352	0.248696	0.531271
Hymenobacter sp. sh-6	31.57819	-0.56634	0.491871	-1.1514	0.249567	0.532819
Gordonia sp. MMS17-SY073	241.4006	-0.55347	0.480904	-1.15089	0.249776	0.532953
Kibdelosporangium phytohabitans	158.5203	-0.45592	0.396788	-1.14902	0.250548	0.534286
Methanobacterium lacus	1.623347	3.354075	2.924996	1.146694	0.251508	0.535609
Staphylococcus hominis	7344.603	-0.56153	0.489802	-1.14645	0.251609	0.535609
Propionibacterium phage PHL010M04	8.588527	-1.87139	1.631426	-1.14709	0.251346	0.535609
Corynebacterium sp. NML98-0116	2571.503	0.493665	0.430865	1.145754	0.251897	0.535713
Pseudomonas psychrotolerans	166.3706	-0.53299	0.465241	-1.14562	0.251953	0.535713
Streptomyces peucetius	63.65449	-0.43586	0.380783	-1.14465	0.252354	0.536252
Erysipelotrichaceae bacterium GAM147	52.18914	1.093446	0.95563	1.144215	0.252535	0.536323
Calditerrivibrio nitroreducens	2.598411	2.471934	2.16305	1.1428	0.253122	0.53663
Legionella spiritensis	2.249404	-1.88766	1.651326	-1.14312	0.252989	0.53663
Prevotella scopos	226.2053	-0.59743	0.522456	-1.1435	0.25283	0.53663
Comamonas thiooxydans	253.4627	-0.78507	0.687647	-1.14167	0.25359	0.536997
Sphaerochaeta globosa	4.682374	1.550156	1.357382	1.14202	0.253446	0.536997
Clavibacter michiganensis	448.1375	-0.49431	0.433544	-1.14015	0.254223	0.538023
Candidatus Symbiobacter mobilis	49.95641	-0.77559	0.680573	-1.13961	0.254447	0.538185
Pantoea rwandensis	15.69162	-0.83565	0.734267	-1.13808	0.255088	0.539228
Spongiibacter sp. IMCC21906	2.469078	-1.8338	1.611877	-1.13768	0.255255	0.539267
Staphylococcus phage StB20	96.09325	1.015614	0.893915	1.136142	0.255897	0.54031
Lentzea guizhouensis	137.9165	-0.32882	0.289603	-1.13543	0.256194	0.540623
Actinobacillus equuli	34.94616	-2.23655	1.973166	-1.13348	0.257012	0.542036
Alteromonas sp. BL110	6.183973	-1.43383	1.265808	-1.13274	0.257324	0.542378
Xenorhabdus hominickii	2.589227	-1.96897	1.739642	-1.13183	0.257707	0.542872
Enterobacter kobei	2.863937	-2.26746	2.004885	-1.13097	0.258068	0.543316
Methylophaga frappieri	3.314837	-1.59776	1.413546	-1.13032	0.258342	0.543578
Alteromonas macleodii	25.59323	-1.07802	0.95434	-1.1296	0.258647	0.543906
Gammapapillomavirus 3	2.35505	-3.29737	2.920547	-1.12903	0.258887	0.544096
Laceyella sacchari	2.846878	-1.68612	1.493971	-1.12862	0.259059	0.544143
Polaribacter sp. KT25b	11.59192	1.597293	1.415902	1.12811	0.259274	0.54428
Serratia plymuthica	56.44757	0.611977	0.543302	1.126402	0.259995	0.544482
Glaesserella parasuis	7.831356	-1.30915	1.163015	-1.12566	0.260311	0.544482
Flammeovirga sp. MY04	15.12471	1.131042	1.005009	1.125405	0.260418	0.544482
Streptomyces sp. GSSD-12	82.9814	-0.57902	0.514077	-1.12633	0.260028	0.544482
Actinobacteria bacterium YIM 96077	70.28256	-0.53845	0.478209	-1.12597	0.260178	0.544482
Spirosoma rigui	34.53393	-0.76874	0.682254	-1.12677	0.25984	0.544482
Nakamurella multipartita	174.8161	-0.57934	0.514132	-1.12683	0.259814	0.544482
Sulfitobacter sp. D7	21.95574	-0.80647	0.717353	-1.12423	0.260916	0.544898
Roseiflexus castenholzii	9.793945	-0.96414	0.857422	-1.12447	0.260815	0.544898
Bacteriovorax stolpii	5.021032	-1.68229	1.497342	-1.12352	0.261219	0.545111
Paenibacillus stellifer	9.892957	-0.91243	0.812292	-1.12328	0.261318	0.545111
Brevundimonas sp. LM2	144.589	-0.5061	0.450757	-1.12277	0.261534	0.545249
Streptomyces sp. 11-1-2	27.89076	-1.14396	1.020492	-1.12099	0.262294	0.545432
Sphingomonas taxi	274.554	-0.63625	0.567675	-1.1208	0.262371	0.545432
Streptomyces griseorubiginosus	69.01961	-0.60332	0.537918	-1.12158	0.262043	0.545432
Haloferax gibbonsii	21.4087	-0.65228	0.581586	-1.12156	0.262049	0.545432
Corynebacterium provencense	302.1797	-0.4682	0.417728	-1.12082	0.262363	0.545432

<i>Corynebacterium vitaeruminis</i>	1206.081	-0.33208	0.29648	-1.12007	0.262686	0.5456
<i>Acetobacter senegalensis</i>	3.006669	-2.40172	2.145836	-1.11925	0.263034	0.5456
<i>Clostridium acetobutylicum</i>	25.23215	0.699535	0.625028	1.119207	0.263052	0.5456
<i>Acidothermus cellulolyticus</i>	29.18847	-0.75224	0.672072	-1.11929	0.263017	0.5456
<i>Pseudonocardia</i> sp. HH130630-07	217.0286	-0.47353	0.423363	-1.11849	0.263358	0.545614
<i>Weissella cibaria</i>	16.79052	-1.1696	1.045514	-1.11868	0.263276	0.545614
<i>Halomonas</i> sp. A3H3	35.57312	-0.76563	0.685096	-1.11754	0.263762	0.545664
<i>Fusobacterium gonidiaformans</i>	3.313697	-1.47276	1.317774	-1.11761	0.263732	0.545664
<i>Propionibacterium virus Pacnes201215</i>	16.36772	1.679375	1.502961	1.117378	0.263833	0.545664
<i>Pseudolabrys taiwanensis</i>	115.7712	-0.52829	0.47321	-1.11639	0.264254	0.545916
<i>Escherichia albertii</i>	14.29861	-1.05909	0.94849	-1.11661	0.264162	0.545916
<i>Cutibacterium granulorum</i>	14835.04	-0.69198	0.620137	-1.11585	0.264485	0.545944
<i>Synechococcus</i> sp. CC9902	1.326539	-2.47958	2.222525	-1.11566	0.264568	0.545944
<i>Corynebacterium argentoratense</i>	476.9018	-0.43116	0.386615	-1.11522	0.264758	0.545981
<i>Halomonas huangheensis</i>	20.19256	-0.8586	0.770245	-1.11471	0.264976	0.545981
<i>Dickeya dadantii</i>	47.376	-0.66636	0.597868	-1.11457	0.265036	0.545981
<i>Acinetobacter indicus</i>	41.11398	-0.70611	0.633748	-1.11418	0.2652	0.546009
<i>Methylobacterium aquaticum</i>	157.4638	-0.49453	0.44438	-1.11285	0.265774	0.54605
<i>Streptomyces leeuwenhoekii</i>	53.39694	-0.52216	0.468976	-1.1134	0.265537	0.54605
<i>Ruegeria pomeroyi</i>	61.471	-0.58043	0.521891	-1.11217	0.266065	0.54605
<i>Shewanella marisflavi</i>	3.16801	-1.91594	1.723083	-1.11193	0.266169	0.54605
<i>Rhizobium</i> sp. CCGE532	33.83279	-2.74184	2.461867	-1.11372	0.265398	0.54605
<i>Chromobacterium</i> sp. IIBBL 274-1	52.27823	-1.38261	1.243701	-1.11169	0.266271	0.54605
<i>Stenotrophomonas</i> sp. ZAC14A_NAIMI4_	20.67502	-1.20864	1.087145	-1.11176	0.266243	0.54605
<i>Candidatus Proffttella armatura</i>	1.353466	-2.50109	2.251317	-1.11095	0.266592	0.546401
<i>Corynebacterium riegelii</i>	1570.909	-0.2629	0.237444	-1.10721	0.268205	0.549396
<i>Polaribacter reichenbachii</i>	13.31793	1.162107	1.050467	1.106276	0.268607	0.549911
<i>Lachnospiraceae bacterium oral taxon 50</i>	37.9607	-0.68491	0.61955	-1.1055	0.268943	0.550289
<i>Vibrio harveyi</i>	3.38187	-1.59402	1.442568	-1.10499	0.269164	0.550432
<i>Calothrix parasitica</i>	20.76849	1.205633	1.091453	1.104613	0.269327	0.550457
<i>Acidipropionibacterium virtanenii</i>	100.7619	-0.46196	0.418678	-1.10338	0.269862	0.55124
<i>Pantoea</i> sp. PSNIH1	94.39948	0.97111	0.880528	1.102873	0.270083	0.551381
<i>Lactobacillus ruminis</i>	12.45566	-1.44921	1.314853	-1.10219	0.27038	0.551381
<i>Pediococcus pentosaceus</i>	9.942272	-0.90627	0.823301	-1.10078	0.270992	0.551381
<i>Streptomyces antibioticus</i>	70.75945	-0.52044	0.47239	-1.10172	0.270584	0.551381
<i>Zhongshania aliphaticivorans</i>	4.95992	-1.27583	1.158294	-1.10147	0.27069	0.551381
<i>Sphingobium</i> sp. LF-16	14.64208	-3.19425	2.901564	-1.10087	0.270952	0.551381
<i>Altererythrobacter marenis</i>	29.68262	-0.60705	0.551345	-1.10104	0.27088	0.551381
<i>Friedmanniella luteola</i>	196.8453	-0.40086	0.364356	-1.10018	0.271254	0.551605
<i>Rhodococcus pyridinivorans</i>	130.5745	-0.90816	0.82678	-1.09843	0.272017	0.552539
<i>Gilvibacter</i> sp. SZ-19	1.786487	-1.96105	1.785046	-1.0986	0.271943	0.552539
<i>Dickeya paradisiaca</i>	26.9344	-0.71731	0.65334	-1.09792	0.27224	0.552684
<i>Lacimicrobium alkaliphilum</i>	16.2762	-0.79129	0.721375	-1.09692	0.272676	0.55326
<i>Xanthobacter autotrophicus</i>	174.2888	-0.55653	0.507957	-1.09562	0.273247	0.553794
<i>Stigmatella aurantiaca</i>	84.20451	-0.54947	0.501542	-1.09556	0.273273	0.553794
<i>Mucilaginibacter gotjawali</i>	38.73235	-0.52797	0.482196	-1.09493	0.273548	0.553794
<i>Nostoc flagelliforme</i>	10.02878	1.292311	1.179975	1.095202	0.273428	0.553794
<i>Pseudoalteromonas tunicata</i>	12.14136	-1.12994	1.034093	-1.09268	0.274533	0.55517
<i>Acinetobacter soli</i>	30.91099	-0.86246	0.789162	-1.09288	0.274448	0.55517
<i>Acidihalobacter prosperus</i>	65.95996	-0.56019	0.512947	-1.0921	0.27479	0.555381

Mycobacterium sp. VKM Ac-1817D	26.97013	-0.56858	0.521376	-1.09053	0.27548	0.555849
Pseudomonas vancouverensis	51.95473	-0.7334	0.672156	-1.09112	0.275219	0.555849
Agrococcus jejuensis	150.4997	-0.50808	0.465766	-1.09085	0.275337	0.555849
Propionibacterium virus PHL152M00	18.56369	-1.60387	1.471386	-1.09004	0.275696	0.555976
Pseudomonas sp. pHDV1	108.913	-0.69382	0.637298	-1.08869	0.276292	0.556253
Paenibacillus xylanexedens	17.74542	-1.158	1.063478	-1.08888	0.276205	0.556253
Arthrobacter sp. PAMC 25486	108.0861	-0.37423	0.343622	-1.08908	0.276119	0.556253
Porcine type-C oncovirus	4.869026	2.080495	1.9121	1.088068	0.276565	0.556496
Pusillimonas sp. T7-7	21.30003	-0.73986	0.680355	-1.08746	0.276834	0.556729
Bifidobacterium thermophilum	27.82	0.546632	0.503015	1.086712	0.277164	0.556854
Prevotella fusca	121.9641	-0.49547	0.455968	-1.08663	0.277202	0.556854
Jatrophihabitans sp. GAS493	65.54295	-0.45663	0.420895	-1.08491	0.277962	0.557253
Chromobacterium sp. ATCC 53434	119.8333	-0.51439	0.474342	-1.08443	0.278176	0.557253
Pseudomonas sp. LAB-08	54.56264	-0.7107	0.655357	-1.08445	0.278165	0.557253
Parabacteroides sp. CT06	155.7966	-1.23052	1.13411	-1.08501	0.277919	0.557253
Ferroplasma acidarmanus	1.901149	2.860911	2.63617	1.085253	0.27781	0.557253
Yersinia entomophaga	5.225072	-1.33774	1.233966	-1.0841	0.27832	0.557253
Porphyromonas asaccharolytica	1397.51	0.872656	0.806451	1.082095	0.27921	0.558728
Lacinutrix venerupis	8.651035	1.516346	1.402945	1.08083	0.279773	0.559545
Verrucomicrobia bacterium	60.17006	-0.62254	0.576226	-1.08038	0.279974	0.55964
Candidatus Sulcia muelleri	6.93159	1.402993	1.300226	1.079038	0.280571	0.560526
Achromobacter sp. B7	117.9905	-0.57261	0.531415	-1.07752	0.281249	0.56151
Fermentimonas caenicola	8.979876	-1.28948	1.197017	-1.07724	0.281372	0.56151
Pseudomonas sp. R5-89-07	47.58309	-0.67139	0.623579	-1.07668	0.281625	0.561705
Yersinia frederiksenii	15.77379	-1.26559	1.176164	-1.07603	0.281913	0.561972
Porphyromonas gingivalis	225.6087	-0.78934	0.734322	-1.07493	0.282407	0.562365
Anaerostipes hadrus	222.5064	-0.78662	0.731809	-1.0749	0.282419	0.562365
Alcaligenes faecalis	97.85511	-0.52393	0.48799	-1.07366	0.282977	0.563024
Clostridiaceae bacterium 14S0207	18.96326	0.976631	0.909788	1.073471	0.28306	0.563024
Mesorhizobium sp. DCY119	61.59315	-0.52849	0.492542	-1.07299	0.283274	0.563143
cyanobacterium endosymbiont of Epither	3.424317	2.667009	2.493311	1.069665	0.28477	0.565498
Ralstonia pickettii	75648.99	-0.52626	0.491957	-1.06972	0.284746	0.565498
Vibrio nigripulchritudo	8.637554	-1.33213	1.247129	-1.06816	0.285449	0.565921
Methylobacterium sp. 17Sr1-28	106.7454	-0.54163	0.506942	-1.06843	0.285327	0.565921
Acetobacterium sp. KB-1	4.739426	-1.23584	1.156365	-1.06873	0.285191	0.565921
Corynebacterium glutamicum	678.6779	-0.41472	0.388988	-1.06614	0.286358	0.565971
Candidatus Ruthia magnifica	1.470308	-2.61633	2.45276	-1.06669	0.286112	0.565971
Heliobacterium modesticaldum	27.92937	-0.74319	0.697601	-1.06535	0.286716	0.565971
Gordonibacter pamelaee	40.16985	-0.81611	0.765309	-1.06637	0.286255	0.565971
Halothermothrix orenii	4.373387	1.613875	1.513009	1.066666	0.286123	0.565971
Acinetobacter schindleri	159.2481	-0.77699	0.729021	-1.0658	0.286514	0.565971
Pseudomonas lini	17.65968	-0.75504	0.708728	-1.06535	0.286719	0.565971
Rhodococcus sp. PBTS 1	518.7578	0.544245	0.509927	1.067299	0.285837	0.565971
Sphingopyxis alaskensis	37.68984	-0.54048	0.507611	-1.06476	0.286985	0.566188
Paenibacillus lautus	3.008564	-1.97146	1.852172	-1.0644	0.287146	0.566198
Caulobacteraceae bacterium OTSz_A_272	53.31244	-0.65381	0.614678	-1.06367	0.28748	0.566301
Thalassococcus sp. SH-1	55.71235	-0.51864	0.487624	-1.0636	0.287509	0.566301
beta proteobacterium CB	4.523155	-1.86544	1.755042	-1.0629	0.287826	0.566619
Bacillus altitudinis	14.94425	2.803512	2.642671	1.060863	0.288752	0.567534
Corynebacterium cystitidis	623.0924	-0.34749	0.327558	-1.06085	0.288759	0.567534

<i>Bordetella bronchiseptica</i>	257.8106	-0.62226	0.586191	-1.06153	0.288448	0.567534
<i>Vibrio rumoiensis</i>	12.61903	-1.01794	0.96023	-1.0601	0.2891	0.567625
<i>Porphyrobacter HT-58-2</i>	37.87962	-0.68537	0.646746	-1.05972	0.289274	0.567625
<i>Streptomyces xiamenensis</i>	83.553	-0.47457	0.447797	-1.0598	0.289236	0.567625
<i>Sphingomonas sp. KC8</i>	50.38939	-0.5597	0.52927	-1.05749	0.290286	0.568385
<i>Pseudomonas silesiensis</i>	64.19303	-0.59219	0.559911	-1.05765	0.290217	0.568385
<i>Campylobacter sputorum</i>	14.30488	1.193435	1.127974	1.058034	0.29004	0.568385
<i>Corynebacterium efficiens</i>	803.9635	-0.32494	0.307062	-1.05823	0.289951	0.568385
<i>Fusobacterium sp. oral taxon 203</i>	6.654569	-1.16767	1.106746	-1.05505	0.291405	0.569412
<i>Nostoc piscinale</i>	5.472668	-1.91854	1.819159	-1.05463	0.291595	0.569412
<i>Burkholderia sp. PAMC 28687</i>	236.2181	-0.68625	0.651109	-1.05398	0.291894	0.569412
<i>Mycobacteroides immunogenum</i>	80.29481	-0.51966	0.492911	-1.05427	0.291758	0.569412
<i>Aquimarina sp. AD1</i>	9.026593	1.395934	1.324478	1.05395	0.291906	0.569412
<i>Rhodococcus erythropolis</i>	689.5825	-0.57886	0.548473	-1.0554	0.29124	0.569412
<i>Calothrix sp. NIES-2100</i>	18.6123	1.3097	1.242107	1.054418	0.291692	0.569412
<i>Phytobacter ursingii</i>	12.294	-1.3057	1.247301	-1.04682	0.295183	0.5697
<i>Cytophaga hutchinsonii</i>	29.5245	0.885327	0.843782	1.049236	0.294069	0.5697
<i>Alistipes sp. Marseille-P5997</i>	43.2344	-0.87328	0.832202	-1.04936	0.294012	0.5697
<i>Anabaenopsis circularis</i>	46.333	-0.86848	0.825932	-1.05152	0.29302	0.5697
<i>Lactobacillus acidophilus</i>	13.06926	1.283677	1.220718	1.051575	0.292994	0.5697
<i>Burkholderia dolosa</i>	416.9619	-0.49148	0.468504	-1.04904	0.294161	0.5697
<i>Lactococcus virus Bibb29</i>	3.08782	2.263123	2.149197	1.053009	0.292337	0.5697
<i>Thermus sp. CCB_US3_UF1</i>	17.42723	-0.8779	0.833875	-1.05279	0.292435	0.5697
<i>Actinoplanes teichomyceticus</i>	176.14	-0.51356	0.488303	-1.05173	0.292921	0.5697
<i>Arcobacter trophiarum</i>	7.09531	1.544117	1.473275	1.048085	0.2946	0.5697
<i>Flavonifractor plautii</i>	160.9892	-0.72632	0.691802	-1.04989	0.293767	0.5697
<i>Micromonospora echinospora</i>	87.47192	-0.52693	0.502831	-1.04792	0.294676	0.5697
<i>Thiomonas arsenitoxydans</i>	98.80836	-0.68112	0.650657	-1.04681	0.295185	0.5697
<i>Taylorella asinigenitalis</i>	7.760442	-1.46111	1.392102	-1.04957	0.293915	0.5697
<i>Corynebacterium choanis</i>	206.3401	-0.31678	0.301997	-1.04896	0.294197	0.5697
<i>Pseudomonas brassicacearum</i>	38.20576	-0.82539	0.785167	-1.05123	0.293155	0.5697
<i>Francisella philomiragia</i>	13.27601	1.650957	1.5764	1.047296	0.294963	0.5697
<i>Rubrobacter radiotolerans</i>	45.95838	-0.66487	0.634231	-1.0483	0.294499	0.5697
<i>Geobacter sp. M18</i>	88.815	-0.62109	0.592781	-1.04776	0.294747	0.5697
<i>Deinococcus deserti</i>	45.88882	-0.57351	0.546283	-1.04983	0.293795	0.5697
<i>Paracoccus denitrificans</i>	1890.155	-0.63858	0.610562	-1.04588	0.295616	0.569711
<i>alpha proteobacterium HIMB5</i>	1.771171	-2.20167	2.104126	-1.04636	0.295395	0.569711
<i>Eubacterium limosum</i>	42.19352	-0.80389	0.768948	-1.04544	0.295817	0.569711
<i>Sneathia amnii</i>	9.595161	-1.06488	1.018296	-1.04574	0.29568	0.569711
<i>Megasphaera elsdenii</i>	25.1322	-0.66453	0.635871	-1.04507	0.295992	0.569746
<i>Alteromonas sp. RKMC-009</i>	5.449854	-1.1685	1.119975	-1.04333	0.296796	0.570884
<i>Corynebacterium falsenii</i>	732.6541	-0.40074	0.384183	-1.04311	0.296897	0.570884
<i>Streptomyces sp. TN58</i>	57.41133	-0.56649	0.5448	-1.0398	0.298431	0.57286
<i>Mycolicibacterium aurum</i>	144.1818	-0.45886	0.44223	-1.0376	0.299458	0.57286
<i>Marinobacter sp. LV10R510-11A</i>	6.719756	-1.1798	1.136904	-1.03773	0.299396	0.57286
<i>Pseudomonas parafulva</i>	101.6635	-0.52826	0.509167	-1.03751	0.2995	0.57286
<i>Celeribacter marinus</i>	9.197752	-1.15654	1.114195	-1.03801	0.299266	0.57286
<i>Bacillus methanolicus</i>	8.141406	-0.97742	0.940264	-1.03952	0.298565	0.57286
<i>Rhodococcus sp. 008</i>	105.2265	-1.1409	1.098771	-1.03834	0.299113	0.57286
<i>Thermoactinomyces bacterium SCS</i>	16.74398	-0.78676	0.756962	-1.03936	0.298638	0.57286

Azoarcus sp. KH32C	158.7951	-0.57915	0.557396	-1.03903	0.298793	0.57286
Ruminococcus albus	15.42802	1.084175	1.044743	1.037743	0.29939	0.57286
Hartmannibacter diazotrophicus	64.51413	-0.55476	0.535035	-1.03687	0.299796	0.573126
Marinifilaceae bacterium SPP2	11.02632	1.019149	0.983728	1.036007	0.300199	0.573594
Prosthecochloris sp. CIB 2401	4.885376	-1.56893	1.516662	-1.03446	0.300921	0.574371
Polynucleobacter necessarius	54.76298	-0.49698	0.480275	-1.03479	0.300768	0.574371
Mycobacterium sp. QIA-37	27.85269	-1.09069	1.0562	-1.03265	0.301765	0.57568
Halorhabdus tiamatea	12.04385	-1.0673	1.034046	-1.03216	0.301999	0.575824
Cloacibacterium normanense	82.70067	-0.50831	0.492675	-1.03173	0.302198	0.575902
Hafnia paralvei	4.148553	-1.52775	1.484426	-1.02919	0.303391	0.577057
Pasteurella dagmatis	4.785274	-1.31323	1.276106	-1.02909	0.303438	0.577057
Jeotgalicoccus saudimassiliensis	14.1717	-0.99305	0.964319	-1.02979	0.303108	0.577057
Streptococcus constellatus	51.49121	-0.65718	0.638254	-1.02965	0.303173	0.577057
Defluviitoga tunisiensis	1.980068	2.477672	2.40991	1.028118	0.303894	0.57732
Melissococcus plutonius	12.57627	1.25726	1.22269	1.028274	0.303821	0.57732
Methylobacterium sp. XJLW	59.10773	-1.17722	1.145747	-1.02747	0.304198	0.577595
Candidatus Nitrosotenuis cloacae	39.75062	-0.71348	0.694788	-1.02691	0.304464	0.577799
Sphingorhabdus sp. YGSMI21	27.03277	-0.643	0.626639	-1.02611	0.304841	0.578212
Flavobacteriaceae bacterium 3519-10	9.998436	-1.0768	1.050286	-1.02525	0.305247	0.578366
Aeromonas media	31.14365	-0.65012	0.634523	-1.02459	0.305558	0.578366
Streptococcus equinus	197.246	-0.68116	0.664271	-1.02542	0.305165	0.578366
Sphingorhabdus sp. M41	15.83717	-0.71887	0.701599	-1.02462	0.305544	0.578366
Pseudomonas viridiflava	49.48231	0.637144	0.623483	1.021911	0.306823	0.580305
Olleya aquimaris	8.402021	1.512192	1.480008	1.021746	0.306901	0.580305
Candidatus Gracilibacteria bacterium HO ⁻	2.064386	2.456694	2.413297	1.017983	0.308686	0.583084
Capnocytophaga cynodegmi	5.24301	1.384997	1.361899	1.01696	0.309173	0.583084
Human alphaherpesvirus 1	11.04541	-2.63325	2.588501	-1.01729	0.309017	0.583084
Ruminococcus champanellensis	20.78577	-1.15595	1.135868	-1.01768	0.308829	0.583084
Gemmata sp. SH-PL17	59.26931	-0.54131	0.53212	-1.01726	0.309028	0.583084
Streptococcus porcinus	9.453476	-0.93923	0.925378	-1.01497	0.310119	0.584566
Haloarcula taiwanensis	1.883493	-2.09432	2.067555	-1.01294	0.311087	0.586087
Actinomyces sp. Chiba101	165.6655	-0.44188	0.437053	-1.01104	0.311996	0.586189
Rhizobium sp. NT-26	60.66799	-0.62175	0.614581	-1.01166	0.311702	0.586189
Acidihalobacter ferrooxidans	34.92117	-0.60329	0.596158	-1.01197	0.311553	0.586189
Desulfobacter postgatei	2.229722	-1.42035	1.403805	-1.01179	0.31164	0.586189
Legionella pneumophila	44.13081	0.520555	0.515118	1.010555	0.312229	0.586189
Edwardsiella hoshinae	18.15147	-0.92999	0.920349	-1.01047	0.312269	0.586189
Rhodococcus aetherivorans	108.8986	-0.69777	0.690077	-1.01115	0.311943	0.586189
Nocardia seriolae	180.0803	-0.35868	0.355714	-1.00834	0.313291	0.58767
Pseudomonas sp. R3-52-08	1.803279	-2.91154	2.887993	-1.00815	0.313381	0.58767
Rhodococcus sp. WMMA185	84.54377	-0.51959	0.516085	-1.00678	0.314039	0.588601
Corynebacterium stationis	1298.976	-0.31253	0.31071	-1.00587	0.31448	0.588967
Vibrio alginolyticus	5.23971	-1.19589	1.189411	-1.00545	0.314682	0.588967
Rhodococcus ruber	226.0934	-0.29991	0.298407	-1.00503	0.314882	0.588967
Rhizobium sp. Y9	65.73088	-1.30574	1.298983	-1.0052	0.314801	0.588967
Oceanicoccus sagamiensis	4.667481	-1.2483	1.243382	-1.00395	0.315402	0.589636
Paracoccus sp. BM15	82.5221	-0.49935	0.498024	-1.00267	0.316021	0.589885
Eggerthella sp. YY7918	10.58287	-1.14544	1.142356	-1.0027	0.316007	0.589885
Pseudomonas fuscovaginae	28.63068	-0.75788	0.755401	-1.00329	0.315723	0.589885
Paenarthrobacter aurescens	96.26855	-1.01078	1.009728	-1.00104	0.316808	0.590747

<i>Microlunatus phosphovorus</i>	140.8684	-0.40209	0.401659	-1.00106	0.316796	0.590747
<i>Lysinibacillus fusiformis</i>	8.031135	-1.21471	1.216195	-0.99878	0.317903	0.591878
<i>Citromicrobium</i> sp. JL477	50.24868	-0.56002	0.560579	-0.999	0.317795	0.591878
archaeon AArc-SI	6.077287	-1.07645	1.077078	-0.99942	0.317591	0.591878
<i>Pseudomonas versuta</i>	46.92162	-0.65047	0.651898	-0.99781	0.31837	0.592142
<i>Congregibacter litoralis</i>	4.11486	-1.5991	1.602405	-0.99794	0.31831	0.592142
<i>Cyanothece</i> sp. ATCC 51142	5.542014	1.626828	1.63612	0.99432	0.320067	0.592663
<i>Shewanella</i> sp. Pdp11	1.522225	-2.66911	2.688828	-0.99267	0.320873	0.592663
<i>Amycolatopsis japonica</i>	99.01974	-0.47541	0.479354	-0.99178	0.321306	0.592663
<i>Spiroplasma alleghenense</i>	2.441044	2.361922	2.379934	0.992432	0.320987	0.592663
<i>Methylobacterium</i> sp. 17Sr1-1	104.8628	-0.48576	0.488972	-0.99343	0.320502	0.592663
<i>Novosphingobium pentaromativorans</i>	63.65411	-0.58535	0.588433	-0.99476	0.319851	0.592663
<i>Brevundimonas</i> sp. DS20	354.8618	-0.44279	0.444265	-0.99669	0.318917	0.592663
<i>Pseudomonas granadensis</i>	21.82598	0.97651	0.983696	0.992695	0.320858	0.592663
<i>Streptomyces parvulus</i>	78.59113	-0.39136	0.394196	-0.99282	0.320799	0.592663
<i>Lactobacillus paragasseri</i>	4.078323	-2.10502	2.117978	-0.99388	0.32028	0.592663
<i>Cycloclasticus</i> sp. PY97N	1.774646	-2.88565	2.905345	-0.99322	0.320602	0.592663
<i>Sphaerospermopsis kisseleviana</i>	7.102881	1.55157	1.562346	0.993103	0.32066	0.592663
<i>Vibrio vulnificus</i>	36.00525	-0.62891	0.633899	-0.99213	0.321136	0.592663
<i>Dactylococcopsis salina</i>	2.427895	-2.18793	2.206454	-0.99161	0.32139	0.592663
<i>Hymenobacter swuensis</i>	59.20125	0.527931	0.530405	0.995336	0.319573	0.592663
<i>Bacillus krulwichiae</i>	9.672137	-1.05584	1.063271	-0.99301	0.320705	0.592663
<i>Paludibacter propionigenes</i>	13.48583	-1.00587	1.014447	-0.99155	0.32142	0.592663
<i>Bartonella apis</i>	15.95532	-0.80648	0.814213	-0.9905	0.321931	0.593306
<i>Arthrobacter</i> sp. QXT-31	140.5169	-0.50574	0.511183	-0.98936	0.322489	0.593732
<i>Pluralibacter gergoviae</i>	52.15981	-0.46575	0.470741	-0.9894	0.322468	0.593732
<i>Methanocella conradii</i>	1.312864	-2.45864	2.487131	-0.98854	0.322886	0.593881
<i>Nakamurella panacisegetis</i>	100.0874	-0.4274	0.432357	-0.98852	0.322896	0.593881
<i>Sphingopyxis</i> sp. 113P3	64.56392	-0.63083	0.639204	-0.9869	0.323691	0.595042
<i>Lawsonia intracellularis</i>	5.536564	-1.3555	1.376312	-0.98488	0.324683	0.595343
<i>Microcystis</i> sp. MC19	2.324548	-2.19168	2.225762	-0.98469	0.324777	0.595343
<i>Stenotrophomonas</i> sp. MYb57	35.67567	-0.83886	0.851724	-0.9849	0.324675	0.595343
<i>Nostoc punctiforme</i>	23.54981	1.311879	1.331133	0.985536	0.324361	0.595343
<i>Auritidibacter</i> sp. NML130574	144.7557	-0.31193	0.316354	-0.98601	0.324129	0.595343
<i>Citrobacter koseri</i>	27.56241	-0.6111	0.620891	-0.98423	0.325	0.595343
<i>Clostridium scatologenes</i>	14.4951	1.137185	1.155388	0.984245	0.324995	0.595343
<i>Streptococcus sanguinis</i>	2202.882	-0.61123	0.622067	-0.98258	0.325813	0.596531
<i>Streptococcus acidominimus</i>	17.25502	-1.013	1.031369	-0.98219	0.326007	0.596586
<i>Campylobacter pinnipediorum</i>	11.0795	1.138161	1.159605	0.981507	0.326343	0.596901
<i>Neisseria sicca</i>	401.3327	-0.76704	0.78242	-0.98035	0.326915	0.597051
<i>Chryseobacterium balustinum</i>	64.71023	-0.69562	0.70986	-0.97993	0.327119	0.597051
<i>Staphylococcus felis</i>	45.27502	0.579106	0.590879	0.980075	0.327049	0.597051
<i>Chromohalobacter salexigens</i>	30.90597	-0.48578	0.495855	-0.97968	0.327246	0.597051
[<i>Eubacterium</i>] <i>minutum</i>	11.98866	-1.10212	1.124211	-0.98035	0.326914	0.597051
<i>Saccharomonospora azurea</i>	71.01589	-0.33992	0.347211	-0.97899	0.327586	0.597373
<i>Aeromonas salmonicida</i>	52.80397	-0.47065	0.481006	-0.97847	0.32784	0.597382
<i>Haemophilus influenzae</i>	188.106	-0.6634	0.678106	-0.97831	0.32792	0.597382
<i>Acinetobacter equi</i>	17.93035	0.962708	0.986246	0.976134	0.328998	0.59804
<i>Azotobacter vinelandii</i>	138.4639	-0.51013	0.522777	-0.97581	0.329158	0.59804
<i>Sphingobium herbicidovorans</i>	33.75025	-0.62925	0.644022	-0.97707	0.328537	0.59804

Glutamicibacter halophytocola	135.1405	-0.39108	0.400335	-0.97689	0.328622	0.59804
Corynebacterium crudilactis	321.348	-0.35096	0.359554	-0.9761	0.329017	0.59804
Aeromonas sp. ASNIH1	1.70023	-2.83081	2.902606	-0.97526	0.329429	0.59804
Asaia bogorensis	10.27059	-0.72174	0.740053	-0.97526	0.329432	0.59804
Veillonella parvula	3573.936	-0.53639	0.552121	-0.97151	0.331296	0.599347
Borrelia hermsii	4.704541	2.074255	2.131566	0.973113	0.330497	0.599347
Methanosarcina sp. MTP4	3.41476	2.088437	2.148108	0.972221	0.33094	0.599347
Clostridium ljungdahlii	1.694089	-2.82616	2.908499	-0.97169	0.331204	0.599347
Dietzia timorensis	294.1672	-0.40738	0.418965	-0.97234	0.330881	0.599347
Labrenzia sp. VG12	31.88723	-0.5731	0.589919	-0.97149	0.331305	0.599347
Magnetococcus marinus	2.057418	-1.8434	1.896444	-0.97203	0.331036	0.599347
Persicobacter sp. JZB09	11.54127	-0.8295	0.85444	-0.97081	0.331641	0.59936
Streptomyces sp. CNQ-509	74.5662	-0.5177	0.533269	-0.97081	0.331641	0.59936
Pseudomonas plecoglossicida	97.61887	-0.45595	0.470566	-0.96894	0.332577	0.600751
Isosphaera pallida	11.97447	-0.71263	0.737164	-0.96672	0.333685	0.601282
Gramella sp. SH35	6.494858	-1.1648	1.206252	-0.96563	0.334227	0.601282
Arthrobacter sp. U41	189.8548	-0.3582	0.370731	-0.9662	0.333943	0.601282
Lactobacillus casei	11.94775	-1.05421	1.092414	-0.96503	0.334529	0.601282
Confluentimicrobium sp. EMB200-NS6	43.69456	-0.56159	0.582113	-0.96474	0.334675	0.601282
Amphibacillus xylanus	4.242486	-1.36594	1.415165	-0.96522	0.334436	0.601282
Staphylococcus virus IPLAC1C	206.3285	-1.81157	1.878472	-0.96438	0.334853	0.601282
Kordia sp. SMS9	7.791072	1.341288	1.386756	0.967212	0.333438	0.601282
Streptomyces fungicidicus	62.17828	-0.40015	0.414042	-0.96644	0.333826	0.601282
Pediococcus clausenii	3.775746	-1.67378	1.73259	-0.96606	0.334015	0.601282
Aquaspirillum sp. LM1	40.46599	-0.50433	0.522876	-0.96453	0.334781	0.601282
Clostridium drakei	10.88906	1.422705	1.472379	0.966263	0.333912	0.601282
Thermodesulfobium narugense	1.399142	2.667064	2.767231	0.963802	0.335145	0.601508
Corynebacterium pseudopelargi	652.291	-0.34241	0.357072	-0.95894	0.337588	0.605295
Corynebacterium renale	727.0634	-0.2748	0.286476	-0.95926	0.337429	0.605295
Aminobacter aminovorans	109.3758	-0.52815	0.551828	-0.95709	0.33852	0.60644
Tenericutes bacterium MO-XQ	7.353228	1.321591	1.38095	0.957016	0.338559	0.60644
Propionibacterium phage PHL150M00	8.950594	-1.53379	1.604578	-0.95588	0.339132	0.607166
Sphingomonas sp. LK11	173.1344	-0.49005	0.513354	-0.95461	0.339775	0.608018
Isoptericola dokdonensis	149.6371	-0.41566	0.435918	-0.95353	0.340323	0.6087
Brucella sp. 09RB8910	5.348766	-1.72484	1.811305	-0.95227	0.340962	0.609473
Propionibacterium virus P100D	22.79551	1.40193	1.473107	0.951683	0.341258	0.609473
Corynebacterium glaucum	1591.651	-0.34389	0.361265	-0.95189	0.341151	0.609473
Prevotella jejuni	431.9965	-0.50217	0.528061	-0.95096	0.341623	0.609825
Candidatus Aquiluna sp. UB-MaderosW2r	7.14929	-0.78366	0.825734	-0.94904	0.3426	0.610694
Pseudomonas corrugata	35.05887	-0.77455	0.816086	-0.94911	0.342567	0.610694
Clostridioides difficile	423.0596	0.441868	0.465607	0.949015	0.342613	0.610694
Tenacibaculum jejuense	11.72815	1.238367	1.305835	0.948333	0.34296	0.611013
Rufibacter sp. DG15C	7.816894	-1.0972	1.158145	-0.94738	0.343445	0.611578
Plantactinospora sp. BC1	66.09897	-0.64118	0.677487	-0.94641	0.343941	0.61216
Citrobacter werkmanii	22.0593	-1.04018	1.099667	-0.9459	0.344198	0.612319
Lactobacillus delbrueckii	45.91635	-0.52626	0.556921	-0.94495	0.344685	0.612321
Propionibacterium phage Moyashi	10.16838	-1.7191	1.818658	-0.94526	0.344526	0.612321
Corynebacterium variabile	463.4011	-0.39622	0.419316	-0.94491	0.344704	0.612321
Spirochaeta thermophila	18.43473	-0.6571	0.696028	-0.94407	0.345133	0.612783
Pseudomonas veronii	34.51016	-0.97999	1.04028	-0.94205	0.346169	0.614323

Ruminococcaceae bacterium CPB6	20.79785	-0.74822	0.795041	-0.94111	0.346646	0.614871
Mycoplasma bovirhinis	3.038844	2.605022	2.772301	0.939661	0.347392	0.615892
Streptomyces sp. SAT1	80.4446	-0.4464	0.476183	-0.93745	0.348528	0.617605
Christensenella sp. Marseille-P3954	20.60831	-0.73661	0.787328	-0.93558	0.349491	0.61833
Haemophilus pittmaniae	49.82168	-0.69543	0.743475	-0.93538	0.34959	0.61833
Microbacterium foliorum	292.4023	-0.5053	0.54002	-0.9357	0.349428	0.61833
Synechococcus sp. JA-3-3Ab	48.95583	-0.70711	0.755995	-0.93533	0.349616	0.61833
Mycobacteroides chelonae	600.479	-0.6227	0.667109	-0.93344	0.350595	0.619149
Enterococcus sp. FDAARGOS_375	2.495215	-2.43632	2.618066	-0.93058	0.35207	0.619149
Mycolicibacterium goodii	154.1995	-0.30264	0.325362	-0.93015	0.352292	0.619149
Streptococcus sp. FDAARGOS_192	135.7303	0.703524	0.754436	0.932516	0.35107	0.619149
Lactobacillus rhamnosus	34.95895	-0.59787	0.64256	-0.93044	0.352141	0.619149
Saprospira grandis	1.876089	-1.93926	2.077425	-0.93349	0.350566	0.619149
Parascardovia denticolens	100.5403	-0.58055	0.62359	-0.93098	0.351862	0.619149
Shewanella putrefaciens	2.726982	-2.40932	2.586827	-0.93138	0.351658	0.619149
Streptococcus respiraculi	14.07685	-0.80381	0.861526	-0.93301	0.350815	0.619149
Pseudoalteromonas translucida	6.257735	2.249509	2.416269	0.930984	0.351862	0.619149
Cellulomonas gilvus	124.8243	-0.43222	0.464441	-0.93063	0.352044	0.619149
Enterobacter sp. FY-07	15.2948	-0.72764	0.781173	-0.93148	0.351607	0.619149
Geobacillus subterraneus	2.257007	-2.25341	2.415509	-0.93289	0.350876	0.619149
Corynebacterium ulcerans	548.1974	-0.34218	0.36805	-0.9297	0.352526	0.619261
Halodesulfurarchaeum formicicum	2.686535	-1.32491	1.427475	-0.92815	0.35333	0.620373
Sphingobium sp. MI1205	28.17291	-0.69785	0.752181	-0.92776	0.353531	0.620427
Rhodobacter blasticus	73.70487	-0.4276	0.461123	-0.92731	0.353767	0.620542
Jeotgalibacillus malaysiensis	5.54098	-1.10721	1.195607	-0.92606	0.354413	0.621376
Bacillus butanolivorans	12.98859	-0.82309	0.889599	-0.92523	0.354844	0.621832
Corynebacterium striatum	9726.228	-0.28128	0.30437	-0.92415	0.355409	0.622522
Aurantimicrobium sp. MWH-Mo1	34.71419	-0.5599	0.606232	-0.92357	0.35571	0.622749
Pseudomonas sp. URMO17WK12:111	53.85435	-0.62113	0.672888	-0.92308	0.355965	0.622896
Exiguobacterium sibiricum	14.12395	1.02015	1.10864	0.920181	0.357478	0.624392
Georgenia sp. ZLJ0423	134.0624	-0.3399	0.369411	-0.92013	0.357507	0.624392
Bacillus halodurans	2.076487	-1.75031	1.901831	-0.92033	0.3574	0.624392
Rufibacter sp. DG31D	12.13726	-0.92902	1.009471	-0.9203	0.357415	0.624392
Kingella kingae	16.48228	-0.84402	0.917646	-0.91977	0.357695	0.624422
Exiguobacterium sp. AT1b	50.95955	-0.78279	0.851419	-0.9194	0.357888	0.624459
Rathayibacter toxicus	26.32474	-0.43825	0.47756	-0.91769	0.35878	0.625415
Paenibacillus odorifer	4.856476	-1.08511	1.182074	-0.91797	0.358634	0.625415
Propionibacterium virus Attacne	63.4245	1.306968	1.426552	0.916173	0.359576	0.626503
Maribacter sp. 1_2014MBL_MicDiv	1.532582	-2.67579	2.922104	-0.91571	0.359821	0.62663
Carnobacterium maltaromaticum	78.63776	-0.58938	0.644594	-0.91435	0.360534	0.626672
Xenorhabdus poinarii	2.018279	-2.04424	2.234064	-0.91503	0.360176	0.626672
Teredinibacter turnerae	9.745359	-0.82254	0.899139	-0.91481	0.360292	0.626672
Kosakonia sacchari	13.88311	-0.82822	0.905601	-0.91455	0.360429	0.626672
Capnocytophaga ochracea	54.06362	-0.76125	0.833902	-0.91288	0.361306	0.627672
Sulfurihydrogenibium sp. YO3AOP1	1.787633	2.046095	2.242059	0.912596	0.361455	0.627672
Corynebacterium callunae	478.9347	-0.33603	0.368575	-0.91169	0.361932	0.6282
Pseudomonas cremoricolorata	44.48859	-0.48046	0.527848	-0.91022	0.362709	0.628976
Lactobacillus korensis	1.373649	-2.49786	2.745932	-0.90966	0.363002	0.628976
Staphylococcus saprophyticus	566.6933	0.462256	0.507934	0.910071	0.362785	0.628976
Candidatus Planktophila limnetica	3.621198	1.686763	1.854544	0.90953	0.36307	0.628976

<i>Corynebacterium ammoniagenes</i>	1374.012	-0.2657	0.292531	-0.90829	0.363726	0.629812
Staphylococcus virus PH15	163.8628	1.111656	1.225306	0.907248	0.364276	0.630464
<i>Pseudarthrobacter phenanthrenivorans</i>	171.5946	-0.37845	0.417851	-0.90571	0.36509	0.630679
<i>Actinomyces meyeri</i>	364.005	-0.42682	0.471162	-0.90588	0.365001	0.630679
<i>Proteus mirabilis</i>	32.42791	0.706118	0.779635	0.905703	0.365093	0.630679
Lactococcus virus 712	1.497609	-2.64683	2.922194	-0.90577	0.365059	0.630679
<i>Gemmatimonas phototrophica</i>	31.58785	-0.51402	0.568866	-0.90359	0.36621	0.632217
<i>Lactobacillus crustorum</i>	4.954446	-1.21008	1.339522	-0.90337	0.366331	0.632217
<i>Pseudomonas</i> sp. SWI36	1.485692	-2.63561	2.92223	-0.90192	0.367101	0.632645
<i>Streptomyces lavendulae</i>	63.4591	-0.39002	0.432358	-0.90207	0.367018	0.632645
Clostridiales bacterium CCNA10	87.58148	-0.60244	0.667743	-0.9022	0.36695	0.632645
<i>Natrialba magadii</i>	9.523419	-0.89939	0.998928	-0.90035	0.367932	0.633776
<i>Propionibacterium</i> virus PHL025M00	16.04999	-1.22227	1.358996	-0.89939	0.368445	0.634356
<i>Bacillus gobiensis</i>	3.247681	-1.16938	1.300659	-0.89907	0.368617	0.634356
<i>Alcanivorax dieselolei</i>	73.7138	-0.52901	0.590946	-0.8952	0.370681	0.634905
<i>Halorhabdus utahensis</i>	3.086371	-1.36055	1.516392	-0.89723	0.369598	0.634905
<i>Oceanobacillus kimchii</i>	8.206804	1.060405	1.183604	0.895912	0.3703	0.634905
<i>Formosa agariphila</i>	12.59765	0.959546	1.070026	0.89675	0.369852	0.634905
<i>Flavobacterium arcticum</i>	9.865663	0.98513	1.098005	0.8972	0.369612	0.634905
<i>Aeromonas</i> sp. ASNIH4	4.763205	-1.43542	1.59938	-0.89748	0.369461	0.634905
Staphylococcus virus IPLA5	109.7757	0.971268	1.083515	0.896405	0.370037	0.634905
<i>Citrobacter freundii</i> complex sp. CFNIH3	3.397792	1.905756	2.127746	0.895669	0.37043	0.634905
<i>Synechocystis</i> sp. PCC 6714	1.469763	-2.61657	2.92229	-0.89538	0.370581	0.634905
<i>Haloterrigena daqingensis</i>	13.77563	-0.86789	0.967927	-0.89664	0.369909	0.634905
<i>Actinomyces gaoshouyui</i>	103.1988	-0.32372	0.362329	-0.89343	0.371627	0.636225
<i>Escherichia marmotae</i>	5.012953	-1.63365	1.831722	-0.89187	0.372464	0.637359
<i>Flavobacterium anhuiense</i>	49.89098	-0.62799	0.704758	-0.89107	0.37289	0.637787
<i>Actinopolymorpha singaporensis</i>	85.42234	-0.35257	0.395845	-0.89068	0.373101	0.637848
<i>Pseudomonas</i> sp. LG1E9	67.58125	-0.52534	0.590842	-0.88914	0.373928	0.638662
<i>Chondrocystis</i> sp. NIES-4102	20.90081	-0.70631	0.794365	-0.88915	0.373924	0.638662
<i>Gordonia</i> sp. YC-JH1	240.8738	-0.38181	0.429747	-0.88846	0.374292	0.638984
<i>Streptomyces</i> sp. MOE7	22.78762	-0.89649	1.010677	-0.88702	0.375069	0.64001
<i>Haloterrigena turkmenica</i>	28.71161	-0.48095	0.542984	-0.88575	0.375755	0.64088
<i>Prevotella ruminicola</i>	40.28198	-0.46611	0.526849	-0.88471	0.376311	0.641398
Betapapillomavirus 2	22.63241	-1.19625	1.353844	-0.8836	0.376914	0.641398
<i>Pseudomonas pohangensis</i>	35.18932	-0.60475	0.684204	-0.88387	0.376768	0.641398
<i>Sporosarcina</i> sp. PTS2304	2.681659	-1.93731	2.192652	-0.88355	0.37694	0.641398
<i>Piscirickettsia salmonis</i>	9.608859	0.946761	1.07138	0.883684	0.376867	0.641398
<i>Paenibacillus</i> sp. CAA11	4.567308	-1.14613	1.303939	-0.87897	0.379416	0.642415
<i>Staphylococcus lugdunensis</i>	2286.443	0.461323	0.523987	0.880409	0.378638	0.642415
<i>Enterococcus gilvus</i>	7.887441	-1.02198	1.159868	-0.88112	0.378253	0.642415
<i>Spiroplasma apis</i>	5.245249	1.628528	1.855583	0.877637	0.380141	0.642415
<i>Nitrososphaera viennensis</i>	1.420643	-2.56819	2.922448	-0.87878	0.37952	0.642415
<i>Chryseobacterium gallinarum</i>	30.28538	-0.6883	0.784343	-0.87755	0.380187	0.642415
<i>Bartonella ancashensis</i>	1.706309	-2.20936	2.515141	-0.87843	0.379713	0.642415
<i>Thermus thermophilus</i>	64.2009	-0.51797	0.58793	-0.88101	0.378314	0.642415
<i>Methanocella arvoryzae</i>	3.132203	-1.65043	1.879348	-0.87819	0.379839	0.642415
<i>Nostoc sphaeroides</i>	7.014432	1.623797	1.843564	0.880792	0.37843	0.642415
<i>Virgibacillus</i> sp. Bac332	10.18956	-0.99688	1.13355	-0.87944	0.379165	0.642415
<i>Shewanella psychrophila</i>	2.150224	-1.663	1.891873	-0.87902	0.379389	0.642415

Fischerella sp. NIES-3754	15.15623	1.020758	1.159678	0.880209	0.378746	0.642415
Erysipelothrix sp. 15TAL0474	1.943653	-1.68054	1.910935	-0.87944	0.379165	0.642415
Rhodothermaceae bacterium	55.85625	-0.58218	0.662396	-0.8789	0.379454	0.642415
Thermus aquaticus	5.321468	-0.97605	1.113142	-0.87684	0.380571	0.642766
Gluconobacter oxydans	38.3231	-0.64965	0.741423	-0.87623	0.380907	0.643035
Prosthecochloris sp. HL-130-GSB	2.566201	-1.52275	1.738587	-0.87586	0.381108	0.643075
Betapapillomavirus 3	57.24069	-2.05655	2.351455	-0.87459	0.381799	0.643943
Methylobacterium phyllosphaerae	67.7827	-0.7845	0.897471	-0.87412	0.382055	0.644075
Staphylococcus phage BP39	1.401003	-2.55076	2.922506	-0.8728	0.382773	0.644665
Bacillus marisflavi	9.676364	-0.85671	0.982071	-0.87235	0.383015	0.644665
Tessaracoccus flavus	89.584	-0.46753	0.535829	-0.87253	0.382921	0.644665
Bifidobacterium longum	677.1168	-0.47464	0.544401	-0.87185	0.38329	0.644665
Verrucosipora maris	91.70869	-0.41492	0.475813	-0.87203	0.383194	0.644665
Modestobacter marinus	252.9546	-0.41882	0.481462	-0.86989	0.38436	0.646165
Staphylococcus virus IPLA7	149.5495	0.940625	1.082184	0.869192	0.384742	0.646211
Pseudomonas sp. Leaf58	44.16587	-0.45446	0.522692	-0.86947	0.384591	0.646211
Geminocystis sp. NIES-3709	14.83376	1.044114	1.202242	0.868472	0.385136	0.646573
Pelosinus fermentans	9.432242	-0.86951	1.001668	-0.86806	0.385359	0.646649
Acinetobacter sp. TGL-Y2	15.90938	0.73973	0.853737	0.866461	0.386237	0.647526
Oscillibacter valericigenes	19.7868	-0.95455	1.10143	-0.86664	0.386137	0.647526
Ilyobacter polytropus	6.593252	1.11851	1.291805	0.865851	0.386572	0.647788
Rhodococcus sp. p52	144.5675	-0.77432	0.895045	-0.86512	0.386971	0.648073
Clostridium sp. JN500901	9.47773	0.968061	1.119285	0.864892	0.387098	0.648073
Bacillus cellulosityticus	6.909265	-0.93161	1.07806	-0.86415	0.387505	0.648456
Micromonospora sp. WMMA2032	75.39761	-0.44274	0.513157	-0.86278	0.388258	0.649417
Enterobacter sp. SA187	20.49291	-0.6711	0.778618	-0.86191	0.388737	0.64992
Streptococcus australis	156.2223	-0.4809	0.558961	-0.86035	0.389598	0.649943
Francisella haliotica	3.749897	1.606188	1.86709	0.860263	0.389644	0.649943
Microbacterium sp. CGR1	53.58788	-0.80879	0.93995	-0.86046	0.389535	0.649943
Opitutus terrae	40.48558	-0.43589	0.506688	-0.86027	0.389638	0.649943
Syntrophus aciditrophicus	3.527854	-1.05973	1.23106	-0.86082	0.389335	0.649943
Clostridium estertheticum	39.24749	0.704549	0.819396	0.85984	0.389877	0.650034
Arthrobacter sp. ATCC 21022	109.2654	-0.67947	0.792174	-0.85773	0.391042	0.650357
Lactococcus virus P008	5.22076	-1.58228	1.84396	-0.85809	0.390844	0.650357
[Clostridium] cellulosi	6.416357	-1.20786	1.407275	-0.8583	0.390728	0.650357
Micromonospora rifamycinica	53.36123	-0.41724	0.486558	-0.85754	0.391144	0.650357
Liberibacter crescens	1.89774	-1.79911	2.096237	-0.85826	0.39075	0.650357
Bacillus atrophaeus	2.122646	-2.1045	2.450014	-0.85897	0.390355	0.650357
Methanofollis liminatans	16.21671	-0.66593	0.777695	-0.85628	0.391842	0.651219
Pseudomonas sp. TMW 2.1634	22.51887	-1.11163	1.299126	-0.85567	0.392178	0.651482
Nostoc sp. CENA543	11.85924	-1.15268	1.351345	-0.85299	0.393667	0.652655
Streptomyces nigra	62.94156	-0.36121	0.423038	-0.85386	0.393184	0.652655
Pseudoalteromonas carrageenovora	1.677837	-2.14024	2.509728	-0.85278	0.393782	0.652655
Candidatus Endolissoclinum faulkneri	3.214359	1.723529	2.020453	0.853041	0.393637	0.652655
Streptococcus ruminantium	11.09519	-0.85545	1.001998	-0.85374	0.393248	0.652655
Treponema azotonutricium	2.56176	-1.19726	1.40722	-0.8508	0.394881	0.653422
Psychrobacter sp. PRwf-1	33.21771	1.033922	1.215481	0.850628	0.394976	0.653422
Microlunatus soli	108.4185	-0.35637	0.418811	-0.85091	0.394821	0.653422
Pseudomonas libanensis	24.47984	0.80462	0.945744	0.85078	0.394892	0.653422
Collinsella aerofaciens	320.083	-0.55024	0.647096	-0.85033	0.395143	0.653422

Neisseriaceae bacterium DSM 100970	5.078335	-1.08873	1.281083	-0.84985	0.395408	0.653564
Pseudomonas sp. XWY-1	23.4939	-0.94309	1.111352	-0.84859	0.396107	0.654422
Bifidobacterium catenulatum	40.18085	0.633443	0.747173	0.847786	0.396557	0.654868
Cronobacter universalis	4.617655	-1.43944	1.700995	-0.84623	0.397423	0.656001
Deinococcus geothermalis	29.01936	-0.4335	0.512939	-0.84512	0.398041	0.65602
Arthrobacter sp. ZXY-2	110.3972	-0.65224	0.771419	-0.84551	0.397827	0.65602
Alloactinosynnema sp. L-07	122.1827	-0.35616	0.421197	-0.84559	0.397784	0.65602
Tetragenococcus koreensis	6.038261	-1.08303	1.281816	-0.84492	0.398156	0.65602
Pseudomonas sp. LBUM920	69.8274	0.429018	0.508415	0.843833	0.398762	0.656722
Arcobacter molluscorum	12.99269	1.112003	1.319579	0.842695	0.399399	0.657472
Neisseria lactamica	74.87122	-0.67134	0.799264	-0.83995	0.400934	0.658807
Rhodococcus phage RRH1	1.225253	-2.35189	2.798719	-0.84035	0.400714	0.658807
Segniliparus rotundus	80.29743	-0.40305	0.479666	-0.84027	0.400759	0.658807
Jiangella sp. DSM 45060	158.8359	-0.32959	0.392042	-0.84069	0.400519	0.658807
Aeromonas rivipollensis	15.93247	-0.8271	0.985652	-0.83914	0.401389	0.659257
Pseudomonas sp. 31-12	33.88698	0.562531	0.671738	0.837426	0.402353	0.660244
Bacteroides fragilis	308.6103	-0.56162	0.670476	-0.83764	0.402232	0.660244
Tessaracoccus sp. Marseille-P5995	346.9454	-0.46927	0.560908	-0.83662	0.402806	0.660689
Dickeya sp. NCPPB 3274	5.113858	-1.42228	1.703888	-0.83472	0.403873	0.661655
Paenibacillaceae bacterium GAS479	4.480595	-0.97627	1.169163	-0.83501	0.40371	0.661655
Cellulosimicrobium sp. TH-20	170.1382	-0.40753	0.488288	-0.8346	0.403941	0.661655
Candidatus Protochlamydia amoebophila	1.726901	-1.9014	2.284429	-0.83233	0.405224	0.662881
Rhodococcus hoagii	211.1569	-0.28386	0.34104	-0.83234	0.405217	0.662881
Actinoalloteichus hoggarensis	110.6381	-0.34844	0.418638	-0.83231	0.405235	0.662881
Streptococcus parauberis	14.28806	-0.67516	0.81178	-0.8317	0.405576	0.66314
Methanococcoides methylutens	1.645477	-1.9041	2.293258	-0.8303	0.406368	0.663837
Exiguobacterium sp. ZWU0009	9.645781	-2.38304	2.869938	-0.83035	0.406344	0.663837
Thermacetogenium phaeum	5.132374	-1.11177	1.340955	-0.82909	0.407055	0.664661
Campylobacter iguaniorum	3.672311	1.668606	2.013977	0.828513	0.40738	0.664894
Campylobacter hepaticus	2.76979	1.687249	2.037407	0.828136	0.407594	0.664944
Agarivorans gilvus	2.625827	-1.35341	1.636257	-0.82714	0.408158	0.664986
Corynebacterium terpenotabidum	392.7399	-0.35338	0.427245	-0.82712	0.408168	0.664986
Arcanobacterium phocae	31.15839	-0.44408	0.536854	-0.82718	0.408134	0.664986
Vibrio sp. HBUAS61001	5.913425	1.07056	1.297492	0.8251	0.409315	0.665663
Mariprofundus aestuarium	2.343609	-1.45485	1.762715	-0.82535	0.409175	0.665663
Aeromonas sp. ASNIH2	1.270206	-2.41205	2.922994	-0.8252	0.40926	0.665663
Methanobrevibacter sp. AbM4	4.152885	1.54931	1.876589	0.825599	0.409032	0.665663
Serratia sp. FS14	1.270197	-2.41028	2.923	-0.82459	0.409604	0.665692
Desulfobacca acetoxidans	9.593961	-0.78002	0.946136	-0.82442	0.409699	0.665692
Thioclava nitratreducens	58.29287	-0.46573	0.565817	-0.82312	0.410442	0.666007
Lactobacillus parabuchneri	4.713923	1.445784	1.756362	0.82317	0.410411	0.666007
Paenibacillus sp. JDR-2	3.87794	-0.93538	1.136181	-0.82327	0.410357	0.666007
Lelliottia sp. WB101	13.34152	-0.66969	0.813994	-0.82273	0.410664	0.666071
Dichelobacter nodosus	3.522979	-1.0589	1.288553	-0.82177	0.411207	0.666152
Sulfitobacter sp. SK012	8.198431	-0.73222	0.890901	-0.82189	0.411141	0.666152
Pseudomonas sp. FDAARGOS_380	153.248	0.609687	0.742298	0.82135	0.411447	0.666152
Thermobispora bispora	80.31658	-0.36508	0.444408	-0.82149	0.411368	0.666152
Wenyngzhuangia fucanilytica	9.282481	0.930624	1.134029	0.820635	0.411854	0.666515
Bacteroides caccae	88.32285	-0.78111	0.953834	-0.81891	0.412837	0.667808
Rahnella sp. Y9602	8.656528	2.37013	2.895959	0.818427	0.413114	0.667959

Paenibacillus sp. 320-W	15.7617	-0.67294	0.822647	-0.81801	0.41335	0.668044
Deinococcus gobiensis	71.40189	-0.40322	0.493154	-0.81763	0.413566	0.668096
Rahnella sp. ERMR1:05	34.94053	-0.50898	0.624155	-0.81546	0.414807	0.669804
Actinoalloteichus hymeniacidonis	75.04724	-0.43562	0.534735	-0.81465	0.415275	0.670262
Haloferax volcanii	11.54116	-0.67155	0.825891	-0.81312	0.41615	0.6704
Cryobacterium arcticum	103.5468	-0.38168	0.468985	-0.81385	0.415731	0.6704
Methylobacterium sp. C1	156.3839	-0.57874	0.712515	-0.81225	0.416651	0.6704
Paenibacillus sp. FSL H7-0357	14.00009	-0.69184	0.849806	-0.81412	0.415577	0.6704
Rhodococcus sp. MTM3W5.2	158.7464	-0.3182	0.391694	-0.81237	0.416581	0.6704
Acinetobacter sp. WCHA55	137.051	0.518751	0.63837	0.812618	0.416437	0.6704
Tenacibaculum mesophilum	2.176568	-1.98397	2.440165	-0.81305	0.416192	0.6704
Enterobacter asburiae	35.82203	-0.62563	0.771519	-0.8109	0.417423	0.671346
Propionibacterium virus PHL112N00	24.91381	1.089862	1.344793	0.810431	0.417693	0.671461
Paenibacillus physcomitrellae	7.296847	-0.8649	1.06787	-0.80993	0.417978	0.671461
Arthrobacter sp. YC-RL1	188.6641	-0.32635	0.402989	-0.80981	0.418048	0.671461
Desulfitobacterium metallireducens	3.849914	-1.20754	1.493862	-0.80833	0.418898	0.672529
Dermabacter vaginalis	1220.56	-0.31768	0.393681	-0.80695	0.419693	0.673211
Streptococcus infantarius	31.25742	-0.92476	1.145842	-0.80706	0.419632	0.673211
Solibacillus sp. R5-41	11.84174	-0.72623	0.901191	-0.80585	0.420328	0.673295
Streptomyces violaceusniger	44.26954	-0.47604	0.590965	-0.80553	0.420514	0.673295
Micromonospora sp. L5	1.216231	-2.35152	2.923222	-0.80443	0.421149	0.673295
Alistipes finegoldii	113.7298	-0.51831	0.645369	-0.80313	0.421901	0.673295
Rhodovulum sp. MB263	67.18723	-0.45857	0.571057	-0.80302	0.421966	0.673295
Bacillus anthracis	65.60498	1.501531	1.86244	0.806217	0.420118	0.673295
Sphingobacterium sp. B29	45.67979	0.85746	1.066571	0.803941	0.421431	0.673295
Pseudomonas taetrolens	34.84849	-0.5385	0.670371	-0.80329	0.421809	0.673295
Spirosoma radiotolerans	21.75933	-0.55869	0.695384	-0.80343	0.421725	0.673295
Methylocystis bryophila	60.79909	-0.52547	0.65318	-0.80448	0.421121	0.673295
Octadecabacter antarcticus	13.19424	-0.84804	1.053628	-0.80487	0.420893	0.673295
Halobacillus mangrovi	5.756139	-0.94406	1.173268	-0.80464	0.421027	0.673295
Pseudomonas extremaustralis	35.57829	-0.4503	0.561102	-0.80252	0.422252	0.673456
Corynebacterium minutissimum	48137.29	-0.21537	0.269042	-0.80052	0.42341	0.67351
Providencia alcalifaciens	7.681949	-1.04167	1.302235	-0.79991	0.423762	0.67351
Halalkalicoccus jeotgali	19.69209	-0.52535	0.658305	-0.79804	0.424847	0.67351
Thioalkalivibrio paradoxus	38.00992	-0.51721	0.645407	-0.80138	0.422914	0.67351
Lactobacillus kunkeei	2.412004	-1.42174	1.77684	-0.80015	0.423625	0.67351
Haloarcula marismortui	1.206285	-2.33435	2.923288	-0.79854	0.42456	0.67351
Propionibacterium phage QueenBey	5.686926	-1.68605	2.108406	-0.79968	0.423896	0.67351
Miniimonas sp. S16	152.8033	-0.36909	0.461903	-0.79906	0.424257	0.67351
Arthrobacter alpinus	289.5179	-0.25208	0.314911	-0.80048	0.423434	0.67351
Corynebacterium urealyticum	1689.228	-0.30492	0.381516	-0.79924	0.424151	0.67351
Sphingobacterium mizutaii	19.7014	-0.64343	0.803338	-0.80094	0.423166	0.67351
Pseudomonas sp. CCOS 191	37.19322	-0.62715	0.785306	-0.79861	0.424517	0.67351
Lactobacillus murinus	2.320139	-1.51664	1.892252	-0.8015	0.422843	0.67351
Bacteroides zoogloformans	63.27881	-0.71792	0.899661	-0.79799	0.424878	0.67351
Candidatus Atelocyanobacterium thalass:	3.88411	1.482546	1.858711	0.79762	0.425091	0.673554
Clostridium septicum	18.89242	0.692002	0.868402	0.796869	0.425527	0.67376
Chryseobacterium sp. IHB B 17019	26.64396	0.623056	0.781989	0.796759	0.425591	0.67376
Mesorhizobium huakuii	52.03623	-0.76321	0.959092	-0.79577	0.426168	0.673793
Halobacterium hubeiense	14.02264	-0.49324	0.619442	-0.79627	0.425876	0.673793

<i>Neisseria cinerea</i>	69.54491	-0.66083	0.830242	-0.79594	0.426065	0.673793
<i>Geobacillus</i> sp. GHH01	0.378355	2.336925	2.940915	0.794625	0.426832	0.67455
<i>Lacinutrix</i> sp. 5H-3-7-4	13.48961	0.857051	1.079387	0.794016	0.427186	0.674644
<i>Novosphingobium</i> sp. P6W	82.04778	-0.36238	0.456461	-0.79389	0.427262	0.674644
<i>Leptolyngbya</i> sp. NIES-3755	1.371803	-1.87646	2.365974	-0.7931	0.427718	0.675071
<i>Lactobacillus mucosae</i>	2.59413	-1.28956	1.62858	-0.79183	0.42846	0.6755
<i>Paracoccus zhejiangensis</i>	224.9006	-0.42848	0.541151	-0.7918	0.428476	0.6755
Aerococcaceae bacterium ZY16052	24.06427	-0.69347	0.876282	-0.79137	0.428725	0.6755
<i>Paraoskovia marina</i>	71.01054	-0.32135	0.406077	-0.79136	0.428732	0.6755
<i>Sphingopyxis terrae</i>	52.26026	-0.50113	0.633525	-0.79102	0.428933	0.675523
<i>Mucilaginibacter</i> sp. HYN0043	36.53041	0.526297	0.665898	0.790356	0.42932	0.675736
<i>Lactobacillus pentosus</i>	13.43328	-0.64837	0.820569	-0.79015	0.42944	0.675736
<i>Azospira oryzae</i>	202.8756	-0.49338	0.624983	-0.78943	0.429861	0.676054
<i>Vibrio rotiferianus</i>	0.886837	2.312352	2.93011	0.789169	0.430013	0.676054
<i>Paraglaciicola psychrophila</i>	6.874587	-1.28726	1.634741	-0.78744	0.431023	0.677349
<i>Halostagnicola larsenii</i>	10.95685	-0.87159	1.107799	-0.78678	0.431413	0.677668
<i>Cyanobacterium aponinum</i>	4.813233	1.074789	1.367455	0.785978	0.431881	0.677818
<i>Psychrobacter</i> sp. P11G3	34.15872	-0.62442	0.794196	-0.78622	0.431736	0.677818
<i>Desulfohalobium retbaense</i>	3.306457	-1.11417	1.418422	-0.7855	0.432163	0.677968
<i>Methylobacterium</i> sp. 17SD2-17	143.0721	-0.39547	0.503807	-0.78497	0.432469	0.678157
<i>Bacillus clausii</i>	9.090024	-0.79946	1.020225	-0.78361	0.433268	0.678824
<i>Gryllotalpicola</i> sp. 2DFW10M-5	104.3649	-0.35193	0.448966	-0.78388	0.433113	0.678824
<i>Sphingopyxis</i> sp. WS5A3p	54.96362	-0.40654	0.52007	-0.7817	0.434389	0.680287
<i>Corynebacterium doosanense</i>	1295.68	-0.25925	0.332522	-0.77965	0.435598	0.681887
<i>Gramella</i> sp. MAR_2010_147	5.321381	-1.12181	1.440563	-0.77873	0.436137	0.682438
<i>Streptococcus</i> sp. JS71	107.8773	-0.63133	0.812082	-0.77743	0.436907	0.683085
<i>Roseiflexus</i> sp. RS-1	16.39999	-0.58579	0.75374	-0.77717	0.437057	0.683085
<i>Streptococcus suis</i>	164.1955	0.373389	0.480505	0.777075	0.437115	0.683085
<i>Sphingobium baderi</i>	85.23127	-0.43561	0.560822	-0.77674	0.437312	0.6831
Candidatus <i>Coxiella mudrowiae</i>	2.547471	-1.27571	1.644033	-0.77596	0.437771	0.683322
<i>Paeniclostridium sordellii</i>	27.64965	0.525217	0.676946	0.775863	0.43783	0.683322
<i>Staphylococcus argenteus</i>	87.14592	0.410661	0.52976	0.775183	0.438232	0.683432
<i>Altererythrobacter</i> sp. ZODW24	8.419664	-0.65879	0.850058	-0.77499	0.438345	0.683432
<i>Vibrio azureus</i>	2.34114	1.859277	2.401498	0.774216	0.438803	0.683432
<i>Xenorhabdus bovienii</i>	12.77251	-0.71289	0.920899	-0.77413	0.438855	0.683432
<i>Aeromicrobium choanae</i>	211.0762	-0.40427	0.522332	-0.77398	0.438943	0.683432
<i>Mycobacterium marinum</i>	75.78012	0.449686	0.581112	0.773837	0.439027	0.683432
<i>Haliscomenobacter hydrossis</i>	25.23915	0.393331	0.509487	0.772014	0.440106	0.683733
<i>Amycolatopsis</i> sp. BJA-103	78.99791	-0.36175	0.46797	-0.77302	0.439509	0.683733
<i>Myroides profundus</i>	0.727532	2.2633	2.933126	0.771634	0.440331	0.683733
<i>Bacillus</i> sp. FJAT-42376	6.228378	-0.88358	1.145596	-0.77129	0.440536	0.683733
<i>Spirosoma montaniterrae</i>	10.8761	-0.60623	0.785876	-0.77141	0.440462	0.683733
<i>Paracoccus contaminans</i>	538.9385	-0.3897	0.504314	-0.77274	0.439676	0.683733
<i>Corynebacterium epidermidicanis</i>	724.5554	-0.23921	0.310002	-0.77164	0.440328	0.683733
<i>Actinobacillus pleuropneumoniae</i>	7.759103	-1.08212	1.404904	-0.77024	0.441155	0.684402
<i>Glaciicola nitratireducens</i>	1.624574	-1.77653	2.312088	-0.76837	0.44227	0.685838
<i>Acetohalobium arabaticum</i>	3.250681	1.251909	1.631854	0.76717	0.442981	0.686648
<i>Hymenobacter</i> sp. PAMC 26554	106.7209	-0.43072	0.561953	-0.76647	0.443395	0.686997
<i>Pediococcus inopinatus</i>	1.827078	-1.46668	1.916915	-0.76512	0.444198	0.687949
<i>Aurantimicrobium minutum</i>	15.30295	-0.69553	0.910516	-0.76389	0.444933	0.688794

<i>Flexistipes sinuarabici</i>	2.172556	-1.57826	2.0683	-0.76307	0.44542	0.689195
<i>Lactobacillus paraplantarum</i>	1.976891	-1.7222	2.257672	-0.76282	0.445571	0.689195
<i>Rhodococcus coprophilus</i>	122.6033	-0.46745	0.613388	-0.76208	0.446013	0.689586
<i>Bacillus safensis</i>	6.926376	-0.99795	1.31216	-0.76054	0.446931	0.689926
<i>Polynucleobacter duraquae</i>	1.840121	-1.25158	1.645863	-0.76044	0.446991	0.689926
<i>Pseudomonas</i> sp. DR 5-09	24.29218	-0.6523	0.857524	-0.76068	0.446847	0.689926
<i>Fusobacterium periodonticum</i>	162.0089	-0.37376	0.490987	-0.76123	0.446518	0.689926
<i>Kosakonia</i> sp. CCTCC M2018092	9.996676	-0.8822	1.161136	-0.75978	0.447387	0.690244
<i>Nitrosococcus oceani</i>	6.920467	-0.82772	1.09047	-0.75905	0.447821	0.69062
<i>Chryseobacterium</i> sp. H3001	14.09964	-0.87567	1.154963	-0.75818	0.448342	0.690851
<i>Gammapapillomavirus 19</i>	1.842238	2.052581	2.709176	0.75764	0.448666	0.690851
<i>Acidithiobacillus ferrivorans</i>	13.70632	-0.79516	1.048868	-0.75811	0.448382	0.690851
<i>Paraphotobacterium marinum</i>	8.774556	0.813901	1.07441	0.757533	0.44873	0.690851
<i>Euzebya</i> sp. DY32-46	80.05848	-0.29791	0.393459	-0.75716	0.448952	0.6909
<i>Finegoldia magna</i>	7219.456	-0.29464	0.389638	-0.75619	0.449533	0.691463
<i>Methylovulum psychrotolerans</i>	10.23976	-0.80849	1.069549	-0.75592	0.449698	0.691463
<i>Hymenobacter</i> sp. APR13	55.74775	-0.34586	0.457931	-0.75527	0.450087	0.691769
<i>Weissella koreensis</i>	4.935955	-1.15887	1.537034	-0.75397	0.45087	0.692387
<i>Corynebacterium jeikeium</i>	11923.79	-0.2998	0.39759	-0.75404	0.450823	0.692387
<i>Anabaena</i> sp. 90	2.648027	-1.31566	1.745757	-0.75363	0.45107	0.692402
<i>Porphyromonas crevioricanis</i>	20.64839	-0.66313	0.881315	-0.75243	0.451791	0.692819
<i>Melioribacter roseus</i>	2.229902	-1.33183	1.770506	-0.75223	0.451913	0.692819
<i>Klebsiella variicola</i>	34.23938	-0.70969	0.943076	-0.75253	0.451732	0.692819
<i>Dechloromonas aromatica</i>	58.51576	-0.31845	0.424152	-0.75079	0.45278	0.693857
<i>Corynebacterium casei</i>	1538.904	-0.21577	0.287608	-0.75021	0.453131	0.694101
<i>Bacteroides heparinolyticus</i>	125.2898	-0.56484	0.75384	-0.74929	0.453684	0.69416
<i>Flavobacterium crassostreae</i>	3.818162	-1.14843	1.534193	-0.74856	0.454123	0.69416
<i>Aquimarina</i> sp. AD10	13.87867	0.738526	0.98645	0.748671	0.454056	0.69416
<i>Mycobacterium</i> sp. WY10	27.9315	-0.61472	0.820376	-0.74931	0.453668	0.69416
<i>Mixta gaviniae</i>	38.13691	-0.41453	0.553437	-0.749	0.453854	0.69416
<i>Cellvibrio</i> sp. PSBB023	16.081	-0.47751	0.640232	-0.74584	0.455766	0.696378
<i>Shewanella violacea</i>	1.739571	-2.05904	2.764247	-0.74488	0.456343	0.696383
<i>Rhizobium</i> sp. TAL182	1.0788	-2.17876	2.923926	-0.74515	0.456181	0.696383
<i>Pseudomonas arsenicoxydans</i>	48.37461	0.505395	0.67827	0.745124	0.456197	0.696383
<i>Sporosarcina psychrophila</i>	11.68207	-0.82615	1.109835	-0.74439	0.456641	0.696545
<i>Enterobacter roggkampii</i>	19.85177	0.88221	1.185825	0.743963	0.456899	0.696646
<i>Polaribacter</i> sp. SA4-12	12.02054	0.959865	1.291323	0.743319	0.457289	0.696948
<i>Calyptogenia okutanii thioautotrophic gill</i>	2.778131	-1.23031	1.656007	-0.74294	0.457518	0.697007
<i>Lactobacillus backii</i>	15.14302	-0.78389	1.055675	-0.74255	0.457757	0.697078
<i>Pseudomonas</i> sp. B10	32.38097	-0.72542	0.978112	-0.74165	0.4583	0.697613
<i>Desulfurispirillum indicum</i>	6.834191	-0.75234	1.016726	-0.73997	0.459321	0.698583
<i>Deinococcus actinosclerus</i>	86.32679	-0.33306	0.450036	-0.74007	0.45926	0.698583
<i>Friedmanniella sagamiharensis</i>	307.3162	-0.39635	0.536801	-0.73835	0.460299	0.699008
<i>Staphylococcus schleiferi</i>	59.25783	0.38284	0.518585	0.738239	0.460369	0.699008
<i>Thalassolituus oleivorans</i>	8.042833	-0.79455	1.075395	-0.73884	0.460001	0.699008
<i>Mycobacterium haemophilum</i>	67.90021	-0.31589	0.427677	-0.73861	0.460143	0.699008
<i>Candidatus Planktophila dulcis</i>	19.92122	-0.63171	0.85712	-0.73702	0.461112	0.699844
endosymbiont of <i>Acanthamoeba</i> sp. UW	1.382694	-1.74224	2.365932	-0.73639	0.461496	0.699863
<i>Oscillibacter</i> sp. PEA192	95.22366	-0.5189	0.704834	-0.7362	0.461611	0.699863
<i>Mycetocola</i> sp. 449	70.66591	-0.26031	0.353653	-0.73605	0.461702	0.699863

<i>Pseudomonas oryzae</i>	224.5293	-0.37074	0.504075	-0.73548	0.462047	0.700094
<i>Corynebacterium singulare</i>	6418.27	-0.24	0.326583	-0.73489	0.462404	0.700344
<i>Desulfobacula toluolica</i>	2.117441	-1.05824	1.442167	-0.73379	0.463078	0.700866
<i>Flavobacterium commune</i>	23.96487	-0.6198	0.84477	-0.7337	0.463134	0.700866
<i>Arthrobacter</i> sp. ERGS1:01	154.3344	-0.2715	0.370325	-0.73314	0.463474	0.701089
<i>Streptosporangium</i> sp. 'caverna'	96.51279	-0.31275	0.4271	-0.73227	0.464006	0.701212
<i>Capnocytophaga haemolytica</i>	10.82364	-0.85857	1.173201	-0.73182	0.464277	0.701212
<i>Tenacibaculum todarodis</i>	7.12372	1.07626	1.47313	0.730594	0.465027	0.701212
<i>Methanobrevibacter olleyae</i>	4.804631	1.375628	1.883187	0.730479	0.465097	0.701212
<i>Campylobacter jejuni</i>	62.08163	0.47359	0.646862	0.732135	0.464086	0.701212
<i>Dietzia psychrocaliphila</i>	434.2733	-0.40505	0.553643	-0.73162	0.464402	0.701212
<i>Filifactor alocis</i>	79.96276	-0.45157	0.617916	-0.7308	0.464901	0.701212
<i>Halothece</i> sp. PCC 7418	3.24107	-1.0494	1.435409	-0.73108	0.464731	0.701212
<i>Gammapapillomavirus 22</i>	1.050335	-2.13269	2.924129	-0.72934	0.465793	0.701969
<i>Sinorhizobium</i> sp. RAC02	91.39436	-0.41121	0.564118	-0.72894	0.466035	0.702044
<i>Pelosinus</i> sp. UFO1	9.615714	0.911504	1.251942	0.728072	0.466569	0.702558
<i>Thiohalobacter thiocyanaticus</i>	39.55254	-0.41097	0.565638	-0.72656	0.467493	0.703657
<i>Pseudomonas koreensis</i>	194.4013	-0.41505	0.572335	-0.72519	0.468334	0.704632
<i>Propionibacterium virus P100A</i>	7.791832	-1.41864	1.959067	-0.72414	0.468981	0.705313
<i>Phycococcus dokdonensis</i>	232.2839	-0.3605	0.498861	-0.72264	0.469898	0.7064
<i>Frondihabitans</i> sp. PAMC 28766	165.7333	-0.3037	0.420911	-0.72154	0.470577	0.70666
<i>Cellulophaga baltica</i>	7.573067	0.902302	1.249718	0.722005	0.470292	0.70666
<i>Rickettsiales endosymbiont of Stachyamc</i>	2.756008	1.590282	2.20491	0.721246	0.470758	0.70666
<i>Microbacterium hominis</i>	293.3354	-0.42456	0.58876	-0.7211	0.470848	0.70666
<i>Pararhodospirillum photometricum</i>	49.39742	-0.42507	0.590366	-0.72001	0.471519	0.706666
<i>Edwardsiella tarda</i>	21.09068	-0.82127	1.140987	-0.71979	0.471656	0.706666
<i>Paracoccus aminovorans</i>	212.1909	-0.42065	0.583968	-0.72033	0.471325	0.706666
<i>Corynebacterium kroppenstedtii</i>	33651.21	-0.55006	0.764483	-0.71952	0.471823	0.706666
<i>Streptococcus gordonii</i>	6524.031	-0.40413	0.561596	-0.71961	0.471766	0.706666
<i>Betapapillomavirus 1</i>	405.6211	-0.85632	1.192711	-0.71796	0.472779	0.706934
<i>Xanthomonas euvesicatoria</i>	41.62786	-0.57472	0.800019	-0.71838	0.472523	0.706934
<i>Edwardsiella ictaluri</i>	4.171994	1.335771	1.860239	0.718065	0.472717	0.706934
<i>Acidaminococcus intestini</i>	6.858534	0.996641	1.387527	0.718286	0.472581	0.706934
<i>Lactobacillus terrae</i>	3.478834	-1.09083	1.522821	-0.71632	0.473793	0.708159
<i>Lysinibacillus</i> sp. YS11	15.23395	-0.84564	1.181907	-0.71549	0.474305	0.708429
<i>Leuconostoc carnosum</i>	68.28045	-0.77897	1.088856	-0.7154	0.474363	0.708429
<i>Alteromonas naphthalenivorans</i>	1.974433	-1.47875	2.070791	-0.7141	0.475166	0.709045
<i>Tatumella ptyseos</i>	5.041452	-1.15192	1.612584	-0.71433	0.475022	0.709045
<i>Gordonia iterans</i>	288.0625	-0.36081	0.50598	-0.71309	0.475788	0.709682
<i>Curtobacterium</i> sp. MR_MD2014	159.546	-0.35712	0.501932	-0.71149	0.476779	0.71087
<i>Capnocytophaga</i> sp. ChDC OS43	90.63845	-0.47102	0.663215	-0.71021	0.477574	0.711311
<i>Propionibacterium virus PHL113M01</i>	21.93323	-1.02553	1.444118	-0.71014	0.477617	0.711311
<i>Mycobacterium</i> sp. PYR15	32.80697	-0.7305	1.029234	-0.70975	0.477857	0.711311
<i>Oscillatoria nigro-viridis</i>	18.91605	0.662487	0.933104	0.709982	0.477716	0.711311
<i>Streptomyces</i> sp. 769	54.04159	-0.39727	0.560299	-0.70903	0.478303	0.711683
<i>Streptomyces pactum</i>	55.07722	-0.35787	0.505109	-0.70849	0.47864	0.711894
<i>Chloroflexus aggregans</i>	11.04949	-0.82443	1.165312	-0.70748	0.47927	0.71254
<i>Bacillus thermoamylovorans</i>	5.984187	-0.76605	1.085282	-0.70586	0.480277	0.713746
<i>Streptococcus iniae</i>	11.76345	-0.64249	0.911448	-0.70491	0.480867	0.71433
<i>Corynebacterium deserti</i>	561.2182	-0.22719	0.322603	-0.70425	0.481278	0.714648

Saccharomonospora glauca	94.88189	-0.3551	0.504912	-0.70328	0.481879	0.71525
Staphylococcus hyicus	20.86081	0.61564	0.876836	0.702116	0.482607	0.715817
Corynebacterium timonense	2042.604	-0.29711	0.423205	-0.70204	0.482655	0.715817
Nitrosomonas europaea	5.238726	-0.91928	1.311259	-0.70106	0.483263	0.716148
Allokutzneria albata	149.9878	-0.25525	0.364215	-0.70083	0.483408	0.716148
Tatlockia micdadei	0.878065	-1.87645	2.679032	-0.70042	0.483665	0.716148
Bacteroides salanitronis	38.61845	-0.60826	0.868149	-0.70064	0.483528	0.716148
Klebsiella aerogenes	42.70814	-0.4054	0.579948	-0.69902	0.484538	0.716655
Frondihabitans sp. 762G35	128.3171	-0.37255	0.533266	-0.69861	0.484794	0.716655
Leuconostoc citreum	30.20358	-0.79584	1.139177	-0.69861	0.484796	0.716655
Sediminicola sp. YIK13	4.6465	-0.94432	1.350666	-0.69915	0.484458	0.716655
Mycoplasma cynos	1.515492	1.752801	2.517831	0.696155	0.486332	0.718583
Virgibacillus sp. Bac330	1.957838	-1.45109	2.085221	-0.69589	0.486495	0.718583
Odoribacter splanchnicus	85.25252	0.599905	0.86339	0.694825	0.487165	0.718603
Streptomyces sp. CLI2509	9.286774	-1.2649	1.822164	-0.69418	0.487571	0.718603
Corynebacterium atypicum	925.9296	-0.248	0.35665	-0.69535	0.486837	0.718603
Propionibacterium virus PHL095N00	21.79268	-1.03719	1.494545	-0.69398	0.487694	0.718603
Mycobacterium canettii	79.37398	0.354489	0.510355	0.694593	0.48731	0.718603
Bacteroides ovatus	157.7936	-0.51999	0.747975	-0.6952	0.486929	0.718603
Labrenzia aggregata	14.05478	-0.81667	1.178219	-0.69314	0.488223	0.719092
Enterococcus faecium	159.0046	-0.41882	0.606283	-0.69081	0.489688	0.719255
Streptomyces ambofaciens	75.77955	-0.30164	0.43748	-0.6895	0.490509	0.719255
Rhodococcus rhodochrous	148.8623	-0.31926	0.461935	-0.69113	0.489481	0.719255
Brevundimonas vesicularis	311.6989	-0.37579	0.544683	-0.68992	0.490243	0.719255
Halanaerobium praevalens	8.6416	0.652123	0.945791	0.6895	0.490509	0.719255
Haemophilus parainfluenzae	1337.631	-0.46225	0.669777	-0.69015	0.490101	0.719255
Paenibacillus riograndensis	6.854662	-0.88885	1.287512	-0.69036	0.489966	0.719255
Rothia dentocariosa	6855.35	-0.48722	0.705419	-0.69068	0.489769	0.719255
Corynebacterium imitans	2644.953	-0.23682	0.343158	-0.69013	0.490111	0.719255
Acetobacter tropicalis	0.966196	-2.01789	2.924662	-0.68996	0.490222	0.719255
Nostoc sp. PCC 7524	1.812122	-1.46343	2.120102	-0.69026	0.490029	0.719255
Gordonia phthalatica	195.9138	-0.27307	0.397666	-0.68668	0.492287	0.720949
Aerococcus viridans	42.82722	0.532843	0.77628	0.686406	0.492457	0.720949
Methylothermobacter versatilis	8.472857	-0.76265	1.110224	-0.68693	0.492127	0.720949
Streptococcus phage PH10	9.398949	-1.13003	1.645613	-0.68669	0.492275	0.720949
[Eubacterium] rectale	392.8152	0.511325	0.74582	0.685588	0.492973	0.721414
Cyanothece sp. PCC 7424	9.154175	0.900999	1.315199	0.685067	0.493302	0.721605
Acinetobacter haemolyticus	84.45078	0.415736	0.607325	0.684536	0.493637	0.721805
Marinilactibacillus sp. 15R	13.37798	-0.65962	0.96467	-0.68377	0.494118	0.722218
Enterococcus mundtii	13.85768	0.607737	0.890254	0.682655	0.494825	0.722628
Chryseobacterium indoltheticum	79.47071	-0.4323	0.633512	-0.68239	0.494994	0.722628
Corynebacterium kutscheri	188.6637	-0.25782	0.377693	-0.68261	0.494853	0.722628
Shewanella frigidimarina	4.428938	1.016898	1.491095	0.681981	0.495251	0.722713
Parachlamydia acanthamoebae	2.038783	-1.54736	2.272191	-0.681	0.495871	0.723328
Gemella sp. oral taxon 928	3.313357	-1.29115	1.896981	-0.68064	0.496102	0.723374
Microbacterium sp. XT11	123.8944	-0.36767	0.540915	-0.67972	0.496684	0.723794
Exiguobacterium sp. U13-1	11.1064	-1.09857	1.617191	-0.67931	0.496944	0.723794
Candidatus Sodalis pierantonius	2.412472	-1.63267	2.403678	-0.67924	0.496987	0.723794
Bacillus subtilis	249.3023	0.456331	0.672262	0.678799	0.497265	0.72391
Mahella australiensis	2.843817	-1.0928	1.61144	-0.67815	0.497676	0.724134

<i>Streptomyces collinus</i>	59.8061	-0.32771	0.483404	-0.67793	0.497817	0.724134
<i>Mycobacterium leprae</i>	29.20433	-0.40697	0.601081	-0.67706	0.498366	0.724642
<i>Capnocytophaga</i> sp. oral taxon 323	56.13199	-0.5428	0.804676	-0.67456	0.499957	0.725216
<i>Flavobacterium</i> sp. HYN0086	40.68405	-0.68134	1.009678	-0.67481	0.499795	0.725216
Rhodobacteraceae bacterium QY30	71.04231	-0.37442	0.553914	-0.67596	0.499067	0.725216
<i>Simonsiella muelleri</i>	27.33765	-0.75456	1.117859	-0.67501	0.499671	0.725216
<i>Vibrio campbellii</i>	11.64539	0.867603	1.284971	0.675193	0.499553	0.725216
<i>Alkaliphilus oremlandii</i>	9.52491	0.74922	1.109791	0.675101	0.499612	0.725216
<i>Salmonella enterica</i>	299.4343	0.253099	0.375646	0.67377	0.500458	0.725654
<i>Methylobacterium alcaliphilum</i>	4.070766	-0.90328	1.342132	-0.67302	0.500935	0.725829
<i>Pseudomonas amygdali</i>	0.938754	-1.96832	2.924905	-0.67295	0.500978	0.725829
<i>Pseudomonas reinekei</i>	25.97337	0.483238	0.72013	0.671042	0.502193	0.727301
<i>Methylobacterium</i> sp. 17Sr1-43	151.4326	-0.32976	0.491879	-0.67041	0.502598	0.727597
<i>Luteipulveratus mongoliensis</i>	156.1569	-0.27144	0.405472	-0.66944	0.503214	0.728198
<i>Lachnoanaerobaculum umeaense</i>	53.26615	-0.44897	0.671601	-0.66851	0.503811	0.728773
<i>Pseudomonas</i> sp. CMR5c	35.51343	0.426368	0.638245	0.668032	0.504113	0.728921
<i>Desulfurella acetivorans</i>	4.016656	1.171238	1.754308	0.667635	0.504366	0.728997
<i>Enterococcus</i> sp. CR-Ec1	0.925602	-1.95182	2.924988	-0.66729	0.504586	0.729025
<i>Rhodococcus</i> sp. H-CA8f	142.9231	0.684857	1.029973	0.664928	0.506097	0.730917
Idiomarinaceae bacterium HL-53	2.156615	-1.19418	1.797282	-0.66444	0.506411	0.731081
<i>Pseudomonas alkylphenolica</i>	80.46018	-0.3465	0.522973	-0.66255	0.507616	0.73253
<i>Pontibacter korensis</i>	10.1944	-0.61122	0.924694	-0.661	0.508612	0.733675
<i>Mycobacterium</i> sp. DL90	149.7812	-0.28358	0.429547	-0.66019	0.509135	0.733848
<i>Citrobacter freundii</i> complex sp. CFNIH2	0.912877	-1.93149	2.925091	-0.66032	0.509049	0.733848
<i>Selenomonas ruminantium</i>	11.10188	-0.55647	0.843326	-0.65985	0.509351	0.73387
<i>Rhodococcus</i> sp. B7740	227.5711	-0.27765	0.422084	-0.65781	0.510657	0.735339
<i>Microterricola viridarii</i>	209.3957	-0.26847	0.408237	-0.65763	0.510775	0.735339
<i>Streptococcus merionis</i>	13.12323	-0.49488	0.753646	-0.65665	0.511407	0.735957
<i>Legionella longbeachae</i>	1.111643	-1.60084	2.440451	-0.65596	0.511849	0.736301
<i>Frischella perrara</i>	5.405845	-0.77743	1.186262	-0.65536	0.512235	0.736565
<i>Fastidiosipila sanguinis</i>	174.3362	0.388252	0.596023	0.651406	0.514785	0.737755
<i>Lactobacillus alimentarius</i>	2.534988	-1.06413	1.631292	-0.65232	0.514193	0.737755
<i>Faecalibaculum rodentium</i>	5.919383	-0.91797	1.408523	-0.65172	0.514581	0.737755
<i>Cyanothece</i> sp. PCC 7822	10.16455	0.924228	1.418212	0.651685	0.514604	0.737755
<i>Winogradskyella</i> sp. PC-19	3.470829	1.075836	1.648784	0.652502	0.514077	0.737755
<i>Salinicoccus halodurans</i>	7.0061	-0.91058	1.394525	-0.65296	0.513779	0.737755
<i>Pseudomonas</i> sp. Lz4W	19.36927	-0.79047	1.211592	-0.65242	0.514127	0.737755
<i>Wolinella succinogenes</i>	1.930222	-1.48272	2.269129	-0.65343	0.513477	0.737755
<i>Tessaracoccus flavescens</i>	217.9197	-0.28246	0.433724	-0.65125	0.514887	0.737755
<i>Planktothrix agardhii</i>	2.596685	-1.0492	1.611897	-0.65091	0.515104	0.737775
<i>Bacillus</i> sp. 1NLA3E	8.117397	-0.69013	1.060808	-0.65057	0.515322	0.737796
Oscillatoriales cyanobacterium JSC-12	11.15563	-0.59314	0.914103	-0.64887	0.516421	0.738789
<i>Lactobacillus amylovorus</i>	14.82688	-0.61005	0.939818	-0.64911	0.516266	0.738789
<i>Candidatus Arthromitus</i> sp. SFB-rat-Yit	6.211624	1.051468	1.625813	0.646733	0.517805	0.740379
<i>Streptomyces</i> sp. ZFG47	73.36317	-0.27159	0.420077	-0.64652	0.517939	0.740379
<i>Pseudodesulfovibrio piezophilus</i>	1.471804	-1.38696	2.149203	-0.64533	0.51871	0.741189
<i>Cronobacter sakazakii</i>	47.69821	-0.47959	0.744884	-0.64385	0.519673	0.742273
<i>Commensalibacter</i> sp. AMU001	1.697364	1.345969	2.091668	0.643491	0.519906	0.742314
<i>Citrobacter rodentium</i>	10.87553	-0.73306	1.140193	-0.64293	0.520272	0.742546
<i>Hydrogenophilus thermoluteolus</i>	33.33176	0.427328	0.665947	0.641685	0.521078	0.743404

Moraxella bovoculi	14.70808	0.777729	1.216078	0.639539	0.522473	0.74482
Clostridium baratii	48.71602	0.377488	0.590558	0.639205	0.52269	0.74482
Flavobacteriaceae bacterium UJ101	8.907819	0.7309	1.143602	0.639121	0.522744	0.74482
[Bacillus] selenitireducens	1.596726	-1.35369	2.119831	-0.63858	0.523094	0.74482
Streptomyces violaceoruber	49.02672	-0.35784	0.560258	-0.63871	0.523015	0.74482
Weissella viridescens	4.148232	-1.11901	1.753514	-0.63815	0.523373	0.744926
Selenomonas sp. oral taxon 136	64.26915	-0.41895	0.658761	-0.63596	0.5248	0.745539
Acinetobacter sp. ACNIH1	91.03416	-0.46514	0.731441	-0.63592	0.524829	0.745539
Ruminococcus bicirculans	101.7301	-0.56096	0.881	-0.63673	0.524301	0.745539
Candidatus Planktophila versatilis	17.93337	-0.4632	0.727842	-0.6364	0.524513	0.745539
Nitrosomonas communis	2.415211	-0.97389	1.529049	-0.63692	0.524175	0.745539
Paenicaligenes hominis	3.948231	-0.85582	1.347746	-0.635	0.525427	0.746098
Aerococcus urinae	55.63541	-0.37592	0.593104	-0.63382	0.526198	0.746902
Planococcus sp. MB-3u-03	15.58574	-0.72993	1.152549	-0.63332	0.526523	0.747071
Tenacibaculum sp. DSM 106434	9.375573	0.756506	1.196257	0.632395	0.527129	0.747112
Polymorphum gilvum	97.2614	-0.31573	0.499555	-0.63202	0.527373	0.747112
Treponema pedis	2.530392	-0.95698	1.512572	-0.63268	0.526942	0.747112
Chryseobacterium camelliae	17.39442	-0.49555	0.783923	-0.63214	0.527294	0.747112
Actinomyces radidentis	227.1635	-0.25534	0.404573	-0.63113	0.527955	0.747646
Gordonibacter massiliensis	32.49234	-0.41453	0.659309	-0.62873	0.529528	0.749057
Lachnoclostridium phocaeense	34.43915	-0.65689	1.045288	-0.62843	0.529724	0.749057
Propionibacterium phage PHL055N00	21.65799	0.921893	1.466025	0.628838	0.529455	0.749057
Brachybacterium sp. VR2415	301.1027	-0.32026	0.509689	-0.62835	0.529775	0.749057
Enterobacter cloacae	357.7308	-0.30176	0.481069	-0.62726	0.530489	0.749774
Streptomyces xinghaiensis	72.01713	-0.23892	0.381157	-0.62682	0.530779	0.749893
Pseudomonas sp. Z003-0.4C(8344-21)	34.58269	-0.48976	0.783258	-0.62529	0.53178	0.751015
Erwinia gerundensis	117.8698	0.485394	0.777079	0.624639	0.532208	0.751328
Chryseobacterium sp. T16E-39	16.9486	0.472039	0.757	0.623566	0.532913	0.752031
Kytococcus sedentarius	510.578	-0.2832	0.454453	-0.62317	0.533171	0.752104
Methylobacterium brachiatum	276.3921	0.378787	0.609078	0.621903	0.534006	0.752698
Pseudodesulfovibrio profundus	16.83358	-0.50988	0.819564	-0.62213	0.533855	0.752698
Exiguobacterium sp. N4-1P	9.244863	-0.67559	1.098531	-0.615	0.538556	0.753265
Mycobacterium sp. YC-RL4	196.8681	-0.3208	0.517221	-0.62023	0.535104	0.753265
Desulfosporosinus meridiei	2.400234	-1.08393	1.751192	-0.61897	0.535939	0.753265
Actinobacteria bacterium IMCC26077	1.110209	-1.49632	2.433413	-0.61491	0.538616	0.753265
Vibrio cholerae	25.43088	-0.54097	0.874974	-0.61827	0.536397	0.753265
Pseudarthrobacter sulfonivorans	119.9811	-0.2221	0.359031	-0.61861	0.536176	0.753265
Actinopolyspora erythraea	76.71077	-0.21257	0.345238	-0.61573	0.538075	0.753265
Denitrovibrio acetiphilus	1.329056	-1.22931	1.990542	-0.61758	0.536855	0.753265
Chlorobaculum tepidum	23.16387	-0.4266	0.687036	-0.62093	0.534649	0.753265
Synechococcus lividus	6.817319	-0.90144	1.461971	-0.6166	0.537502	0.753265
Dehalogenimonas lykanthroporepellens	1.422571	-1.22501	1.97722	-0.61956	0.535545	0.753265
Pseudonocardia sp. EC080625-04	8.507134	1.795284	2.895089	0.620114	0.535183	0.753265
Rhizobium sp. Kim5	6.12728	-1.1164	1.816114	-0.61472	0.538742	0.753265
Staphylococcus sp. SDB 2975	44.25966	-0.56123	0.90874	-0.61759	0.536846	0.753265
Syntrophothermus lipocalidus	1.594642	-1.43097	2.321588	-0.61638	0.537646	0.753265
Treponema sp. OMZ 838	31.85126	-0.57486	0.933424	-0.61586	0.537988	0.753265
Ndongobacter massiliensis	92.48553	-0.53818	0.872455	-0.61685	0.537331	0.753265
Cryptobacterium curtum	15.97328	-0.58625	0.946883	-0.61913	0.535829	0.753265
Acetobacter ghanensis	3.476462	-0.93267	1.506682	-0.61902	0.535901	0.753265

<i>Clostridium formicaceticum</i>	9.823229	0.575022	0.93546	0.614694	0.538757	0.753265
<i>Bacteroides coprosuis</i>	13.19974	-0.62326	1.010979	-0.61649	0.537572	0.753265
<i>Rhodococcus</i> sp. BH4	84.98754	0.632618	1.030629	0.613817	0.539336	0.753452
<i>Pediococcus acidilactici</i>	4.75691	1.000825	1.63344	0.61271	0.540068	0.753452
<i>Bartonella grahamii</i>	1.569829	-1.71836	2.805068	-0.61259	0.540147	0.753452
<i>Bifidobacterium dentium</i>	129.4226	0.416658	0.680403	0.61237	0.540293	0.753452
<i>Thalassotalea crassostreae</i>	1.570132	-1.30384	2.129416	-0.6123	0.54034	0.753452
<i>Aurantimicrobium</i> sp. MWH-Uga1	14.83263	-0.59815	0.975267	-0.61332	0.539663	0.753452
<i>Psychrobacter alimentarius</i>	67.38192	-0.60056	0.980215	-0.61268	0.54009	0.753452
<i>Sulfurimonas gotlandica</i>	2.531006	1.254849	2.052046	0.611511	0.540861	0.753601
<i>Clostridium bornimense</i>	21.09432	0.455311	0.744488	0.611576	0.540818	0.753601
<i>Pseudomonas pseudoalcaligenes</i>	254.4755	-0.42402	0.695496	-0.60967	0.542082	0.753966
<i>Pseudomonas entomophila</i>	68.42743	-0.33982	0.556899	-0.6102	0.541729	0.753966
<i>Mycoplasma canis</i>	2.685526	1.348503	2.213317	0.609268	0.542347	0.753966
<i>Propionibacterium virus P101A</i>	20.42889	1.051614	1.723803	0.610054	0.541826	0.753966
<i>Thiomicrospira cyclica</i>	2.148863	-1.00929	1.657486	-0.60893	0.542574	0.753966
<i>Lactococcus garvieae</i>	9.526587	-0.71989	1.179685	-0.61024	0.541701	0.753966
<i>Terribacillus goriensis</i>	5.594856	-0.77152	1.267009	-0.60893	0.542569	0.753966
<i>Bathymodiolus septemdierum thioautotr</i>	1.85406	-1.39237	2.291795	-0.60755	0.543488	0.754949
<i>Olsenella</i> sp. oral taxon 807	196.3661	0.426397	0.70291	0.606617	0.544105	0.755517
<i>Paenibacillus bovis</i>	6.774723	-0.72588	1.19887	-0.60547	0.544864	0.756282
<i>Bacteroides caecimuris</i>	94.54366	0.581239	0.964567	0.60259	0.546781	0.758654
<i>Sphingomonas melonis</i>	402.6385	-0.35766	0.594105	-0.60202	0.54716	0.758844
<i>Capnocytophaga</i> sp. oral taxon 864	45.04165	-0.40994	0.681239	-0.60176	0.547335	0.758844
<i>Dietzia</i> sp. JS16-p6b	262.1076	-0.25875	0.430725	-0.60072	0.548027	0.759159
<i>Salmonella bongori</i>	4.119849	-0.96944	1.613764	-0.60073	0.548017	0.759159
<i>Actinomyces pacaensis</i>	158.6004	-0.29042	0.483653	-0.60048	0.548188	0.759159
<i>Actinomyces</i> sp. VUL4_3	47.9489	-0.23232	0.388086	-0.59864	0.549416	0.759702
<i>Pseudomonas</i> sp. S09G 359	55.12108	-0.41046	0.684613	-0.59955	0.548803	0.759702
<i>Methanosarcina lacustris</i>	1.352737	-1.55158	2.591005	-0.59883	0.549284	0.759702
<i>Dermacoccus nishinomiyaensis</i>	4000.385	0.390567	0.652272	0.598779	0.54932	0.759702
<i>Metakosakonia</i> sp. MRY16-398	0.401642	1.753168	2.938148	0.596692	0.550713	0.760534
<i>Leptotrichia</i> sp. oral taxon 212	104.0908	-0.35853	0.600699	-0.59686	0.550603	0.760534
<i>Xanthomonas hortorum</i>	113.6398	-0.49125	0.822325	-0.5974	0.550243	0.760534
<i>Lachnoclostridium</i> sp. YL32	24.50782	0.551438	0.924485	0.596481	0.550854	0.760534
<i>Treponema denticola</i>	36.4568	-0.47852	0.805954	-0.59373	0.55269	0.761368
<i>Jiangella alkaliphila</i>	173.2106	-0.28222	0.475312	-0.59375	0.552681	0.761368
<i>Brevibacterium linens</i>	280.6067	-0.24769	0.416535	-0.59464	0.552087	0.761368
<i>Pseudomonas</i> sp. LPH1	52.87519	-0.39348	0.661335	-0.59499	0.551853	0.761368
<i>Mogibacterium diversum</i>	122.2492	-0.45016	0.757698	-0.59411	0.552438	0.761368
<i>Streptomyces</i> sp. PAMC 26508	22.82006	-0.81195	1.367621	-0.5937	0.552714	0.761368
<i>Thioploca ingrica</i>	2.578579	1.116415	1.885273	0.592177	0.553732	0.762194
<i>Campylobacter concisus</i>	77.40978	-0.3335	0.563051	-0.59231	0.553642	0.762194
<i>Janibacter indicus</i>	631.8446	-0.27117	0.459438	-0.59022	0.55504	0.763705
<i>Ichthyobacterium seriolicida</i>	2.174754	1.330141	2.255147	0.589825	0.555308	0.763785
<i>Methanohalophilus mahii</i>	0.794203	-1.72437	2.92623	-0.58928	0.555674	0.763999
<i>Sulfurovum lithotrophicum</i>	3.075892	1.039078	1.770872	0.586761	0.557364	0.765455
<i>Leptospira biflexa</i>	1.972497	1.319506	2.248723	0.58678	0.557351	0.765455
<i>Staphylococcus muscae</i>	23.58892	-0.43351	0.738565	-0.58696	0.557229	0.765455
<i>Dialister pneumosintes</i>	27.60595	-0.5487	0.936934	-0.58563	0.558125	0.766166

Klebsiella sp. M5a1	1.466851	-1.65862	2.833477	-0.58536	0.558303	0.766166
Lactococcus phage jm2	11.3286	-0.89031	1.524148	-0.58413	0.55913	0.767012
Bacteroides dorei	436.5424	-0.54497	0.935189	-0.58274	0.560069	0.767431
Hymenobacter sp. DG25B	46.37614	-0.2959	0.507569	-0.58297	0.559913	0.767431
Pleurocapsa minor	1.538336	-1.243	2.132658	-0.58284	0.560002	0.767431
Methanoregula formicica	1.448134	-1.15313	1.979976	-0.58239	0.560302	0.767445
Lactococcus lactis	2076.397	-0.37432	0.643297	-0.58188	0.560648	0.767445
Brevibacillus laterosporus	17.96382	0.416963	0.716697	0.581785	0.560712	0.767445
Carboxydotherrnus hydrogenoformans	1.837831	-1.12141	1.928709	-0.58143	0.560949	0.767482
Intestinimonas butyriciproducens	58.93604	-0.54095	0.932266	-0.58025	0.561744	0.76828
Legionella anisa	6.909773	-0.67621	1.166218	-0.57984	0.562026	0.768376
Polaribacter sp. Hel1_33_78	6.31268	0.800961	1.384884	0.57836	0.563021	0.769448
Christensenella minuta	43.63595	-0.49885	0.865985	-0.57604	0.564585	0.771045
Sphingomonas sp. LM7	102.6458	-0.29047	0.504279	-0.576	0.564614	0.771045
Mobiluncus curtisii	672.5198	-0.38685	0.672522	-0.57522	0.565144	0.771256
Gallaecimonas sp. HK-28	9.425586	-0.4835	0.840655	-0.57515	0.565192	0.771256
Calothrix brevissima	14.47362	0.921718	1.605092	0.574246	0.565801	0.771798
Arthrobacter sp. YN	112.1181	-0.20631	0.360296	-0.57261	0.566908	0.772149
Corynebacterium lactis	727.7602	-0.22573	0.394131	-0.57272	0.566834	0.772149
Bacillus sp. FJAT-22090	7.651476	0.575602	1.00511	0.572676	0.566864	0.772149
Corynebacterium frankenforstense	1514.183	-0.20706	0.361255	-0.57318	0.566524	0.772149
Gramella salexigens	2.119074	-0.95298	1.668552	-0.57114	0.567905	0.773218
Spiroplasma taiwanense	1.220876	1.635335	2.870328	0.569738	0.568855	0.774057
Sulfurihydrogenibium azorense	1.729084	-1.31709	2.3123	-0.5696	0.568947	0.774057
Paenibacillus terrae	5.568481	-0.62501	1.105164	-0.56554	0.57171	0.774232
Gordonia bronchialis	740.5477	-0.32376	0.572538	-0.56548	0.571749	0.774232
Fictibacillus arsenicus	6.218766	0.729893	1.287773	0.566787	0.570859	0.774232
endosymbiont 'TC1' of Trimyema compre	5.985205	-0.68189	1.204586	-0.56608	0.571338	0.774232
Flavivirga eckloniae	9.305161	0.689602	1.216091	0.567065	0.57067	0.774232
Staphylococcus simulans	559.9691	-0.29014	0.514333	-0.56411	0.572682	0.774232
Saccharophagus degradans	4.859632	-0.80582	1.429325	-0.56378	0.572906	0.774232
Curtobacterium pusillum	296.0052	-0.2909	0.514139	-0.5658	0.571529	0.774232
Paracoccus aminophilus	82.50917	-0.28974	0.513887	-0.56381	0.57288	0.774232
Pseudomonas fluorescens	1367.327	-0.2644	0.467714	-0.5653	0.571867	0.774232
Mycobacterium paraintracellulare	3.956822	-1.29349	2.291344	-0.56451	0.572406	0.774232
Erwinia pyrifoliae	2.138272	-1.37541	2.429462	-0.56614	0.571301	0.774232
Stanieria sp. NIES-3757	9.99332	0.730377	1.291998	0.565308	0.571864	0.774232
Arthrobacter sp. Rue61a	95.97681	-0.5154	0.909383	-0.56675	0.570881	0.774232
Cohaesibacter sp. ES.047	14.22755	-0.35486	0.628249	-0.56483	0.572188	0.774232
Halanaerobium hydrogeniformans	8.272828	0.679267	1.196986	0.567481	0.570387	0.774232
Saccharospirillum mangrovi	22.86648	-0.39832	0.705772	-0.56438	0.572499	0.774232
Synechococcus sp. WH 7803	9.917436	-0.60213	1.063152	-0.56636	0.571149	0.774232
Pseudomonas sp. NS1(2017)	36.25893	-0.3867	0.686402	-0.56337	0.57318	0.774314
Shewanella baltica	114.4868	0.446121	0.792379	0.563014	0.573425	0.774358
Cutibacterium avidum	4169.113	0.303919	0.541848	0.560894	0.57487	0.774443
Staphylococcus xylosus	163.7821	0.261952	0.467621	0.56018	0.575357	0.774443
Acinetobacter sp. NCu2D-2	20.5502	-0.44347	0.791204	-0.5605	0.575141	0.774443
Pedobacter heparinus	29.12668	-0.36373	0.64789	-0.56141	0.574515	0.774443
Flavobacterium columnare	28.29052	0.411187	0.734118	0.56011	0.575404	0.774443
Enterobacteriaceae bacterium strain FGI	6.832064	-0.68199	1.216144	-0.56078	0.57495	0.774443

Kyrpidia spormannii	1.822326	-1.38928	2.478887	-0.56045	0.575175	0.774443
Streptococcus pantholopis	6.242739	-0.68404	1.219398	-0.56097	0.57482	0.774443
Mycobacteroides abscessus	226.0084	-0.21429	0.381437	-0.5618	0.574256	0.774443
Staphylococcus pettenkoferi	2475.621	0.383012	0.684227	0.559773	0.575634	0.774466
Legionella oakridgensis	9.13599	0.673909	1.208533	0.557626	0.5771	0.776152
Virgibacillus necropolis	9.03172	-0.70586	1.267	-0.55711	0.577451	0.776337
Thermoanaerobacter wiegelii	3.612508	1.404836	2.523892	0.556615	0.57779	0.776506
Glutamicibacter arilaitensis	134.0269	-0.21724	0.392795	-0.55305	0.580229	0.779451
Glaesserella sp. 15-184	8.676938	-0.54694	0.989417	-0.55279	0.58041	0.779451
Haloarculaceae archaeon HArce11	2.995442	-0.90731	1.652553	-0.54904	0.58298	0.782613
Spiribacter salinus	12.45975	-0.35774	0.65206	-0.54864	0.583255	0.782693
Janthinobacterium sp. B9-8	21.78864	-0.46211	0.842985	-0.54819	0.583564	0.78282
Acidiphilium cryptum	46.18025	-0.53902	0.987702	-0.54573	0.585252	0.784795
Corynebacterium diphtheriae	2730.728	-0.15901	0.292452	-0.54372	0.586633	0.785948
Candidatus Hoaglandella endobia	0.657266	1.593223	2.931214	0.543537	0.58676	0.785948
Agromyces flavus	110.1615	-0.22969	0.42225	-0.54396	0.586471	0.785948
Kocuria turfanensis	736.9608	-0.24204	0.445602	-0.54318	0.587006	0.785988
secondary endosymbiont of Ctenarytaina	0.710921	-1.57797	2.926992	-0.53911	0.589811	0.789453
Bifidobacterium indicum	1.225432	-1.29012	2.394907	-0.5387	0.590097	0.789503
Propionibacterium phage PHL067M10	17.95491	-0.86996	1.615745	-0.53843	0.590283	0.789503
Ruegeria sp. TM1040	18.4426	-0.36469	0.678914	-0.53717	0.591149	0.789791
Planococcus halocryophilus	2.931909	-1.09539	2.038794	-0.53727	0.591079	0.789791
Prosthecochloris aestuarii	1.31953	-1.28128	2.384542	-0.53733	0.591041	0.789791
Synechococcus sp. JA-2-3B'a(2-13)	10.37328	-0.74125	1.382024	-0.53635	0.591717	0.790259
Weissella ceti	0.977644	-1.4742	2.752048	-0.53567	0.592184	0.790593
Candidatus Thioglobus autotrophicus	5.574127	-0.73677	1.37923	-0.53419	0.593213	0.791095
Vibrio fluvialis	16.95097	-0.42291	0.791291	-0.53446	0.593024	0.791095
Sphingobium indicum	29.05985	-0.60992	1.141177	-0.53447	0.59302	0.791095
Aerococcus urinaeequi	54.69368	0.426647	0.800227	0.533157	0.593925	0.79125
Streptococcus pasteurianus	9.484286	-0.73396	1.376845	-0.53308	0.593981	0.79125
Chryseobacterium sp. G0162	7.952161	-0.67707	1.268665	-0.53369	0.593559	0.79125
Cellulosilyticum lentocellum	14.96758	0.495562	0.938543	0.528013	0.597491	0.791554
Betapapillomavirus 5	12.51404	-0.9048	1.710915	-0.52884	0.596915	0.791554
Aeromonas sp. ASNIH7	2.804884	-1.36087	2.572516	-0.529	0.596803	0.791554
Nostoc sp. 'Lobaria pulmonaria (5183) cyr	11.26939	-0.576	1.08801	-0.52941	0.596524	0.791554
Selenomonas sputigena	81.03896	0.287831	0.544384	0.528727	0.596995	0.791554
Butyrivibrio proteoclasticus	12.85637	0.547047	1.029625	0.531307	0.595206	0.791554
Selenomonas sp. oral taxon 478	48.21641	-0.45476	0.856049	-0.53123	0.595258	0.791554
Pseudoalteromonas luteoviolacea	10.69614	0.607614	1.147058	0.529715	0.59631	0.791554
Virgibacillus phasianinus	3.834113	-0.65896	1.247983	-0.52802	0.597487	0.791554
Acholeplasma laidlawii	1.492889	-1.03676	1.962752	-0.52822	0.597347	0.791554
Virgibacillus halodenitrificans	10.28294	0.666468	1.262909	0.527724	0.597691	0.791554
Chryseobacterium sp. G0186	12.92949	0.498958	0.941311	0.530067	0.596066	0.791554
Citrobacter farmeri	8.429243	-0.64803	1.21791	-0.53209	0.594666	0.791554
Ammonifex degensii	5.935526	-0.64699	1.22067	-0.53003	0.596091	0.791554
Helicobacter cetorum	1.112524	-1.54241	2.922411	-0.52779	0.597647	0.791554
Zunongwangia profunda	11.89488	0.619339	1.170236	0.529242	0.596637	0.791554
Lactococcus virus bIL170	5.017944	1.128676	2.140688	0.527249	0.59802	0.791702
Histophilus somni	10.25159	-0.43674	0.829713	-0.52637	0.598632	0.791955
Vibrio casei	31.50329	-0.52472	0.996901	-0.52635	0.598646	0.791955

<i>Deinococcus swuensis</i>	62.11113	-0.23141	0.441927	-0.52364	0.600526	0.794153
<i>Streptomyces hundungensis</i>	90.85365	-0.20997	0.403336	-0.52059	0.602652	0.794513
<i>Calothrix</i> sp. NIES-4101	8.190178	0.630093	1.209921	0.520772	0.602526	0.794513
<i>Erwinia tasmaniensis</i>	14.47682	0.582587	1.119436	0.520429	0.602764	0.794513
<i>Lonsdalea britannica</i>	5.597545	-0.70968	1.3606	-0.5216	0.601951	0.794513
<i>Sphingomonas</i> sp. FARSPH	230.0515	-0.29732	0.569086	-0.52245	0.60136	0.794513
<i>Acholeplasma oculi</i>	1.126446	-1.2691	2.435512	-0.52108	0.602309	0.794513
<i>Serratia</i> sp. MYb239	0.596184	1.530435	2.932022	0.521973	0.601689	0.794513
<i>Gallibacterium anatis</i>	6.904158	0.649608	1.24516	0.521706	0.601875	0.794513
<i>Hymenobacter</i> sp. PAMC 26628	89.02317	-0.27611	0.529785	-0.52118	0.602242	0.794513
<i>Lactococcus raffinolactis</i>	74.01535	-0.51267	0.98741	-0.51921	0.603616	0.795348
<i>Streptomyces</i> sp. WAC00288	63.6499	-0.32363	0.624554	-0.51818	0.604334	0.796005
<i>Maribacter</i> sp. T28	10.44759	0.655404	1.266002	0.517696	0.604671	0.796161
<i>Campylobacter insulaenigrae</i>	3.515547	1.057015	2.044525	0.516998	0.605158	0.796226
<i>Chloroherpeton thalassium</i>	2.819436	0.790168	1.528307	0.517022	0.605141	0.796226
<i>Chryseobacterium</i> sp. H6466	273.1566	0.357759	0.697924	0.512605	0.608228	0.79652
[<i>Clostridium</i>] <i>bolteae</i>	47.74175	-0.48027	0.933788	-0.51433	0.607023	0.79652
<i>Acinetobacter</i> sp. ACNIH2	48.783	-0.43082	0.838276	-0.51394	0.607297	0.79652
<i>Psychrobacter cryohalolentis</i>	54.97104	-0.57595	1.123515	-0.51263	0.608209	0.79652
<i>Rhizobium</i> sp. IRBG74	82.00514	0.546799	1.064834	0.513506	0.607598	0.79652
<i>Chryseobacterium lactis</i>	21.22421	0.410628	0.799275	0.513751	0.607426	0.79652
<i>Chryseobacterium taklimakanense</i>	82.40274	-0.33734	0.655394	-0.51472	0.60675	0.79652
<i>Halobacteroides halobius</i>	7.687104	0.726339	1.416517	0.512764	0.608116	0.79652
<i>Trichormus variabilis</i>	2.053944	-1.38318	2.681112	-0.5159	0.605926	0.79652
<i>Chlorobium limicola</i>	8.259423	-0.54454	1.059762	-0.51383	0.607373	0.79652
<i>Chlorobium phaeovibrioides</i>	2.077012	1.054744	2.056659	0.512843	0.608061	0.79652
<i>Streptococcus salivarius</i>	1509.663	0.333457	0.648999	0.513801	0.607391	0.79652
<i>Kangiella sediminilitoris</i>	1.208462	-1.13724	2.208338	-0.51498	0.606569	0.79652
<i>Clostridiales bacterium</i> 70B-A	7.667574	-0.65843	1.287569	-0.51137	0.609089	0.796787
<i>Streptomyces formicae</i>	94.23941	-0.17829	0.348393	-0.51175	0.608827	0.796787
<i>Nocardioides dokdonensis</i>	246.6735	-0.21135	0.413175	-0.51152	0.60899	0.796787
<i>Bacillus licheniformis</i>	1.420892	-1.31326	2.573281	-0.51035	0.60981	0.797443
<i>Chryseobacterium</i> sp. F5649	251.9203	0.358947	0.704808	0.509283	0.610554	0.798001
<i>Ornithobacterium rhinotracheale</i>	46.77361	-0.56316	1.106318	-0.50904	0.610722	0.798001
<i>Nocardia cyriacigeorgica</i>	309.8859	-0.17121	0.336504	-0.50879	0.610899	0.798001
<i>Stenotrophomonas rhizophila</i>	252.5241	-0.25544	0.502463	-0.50837	0.61119	0.798001
<i>Desulfovibrio salexigens</i>	4.534295	-0.63525	1.250068	-0.50817	0.611333	0.798001
[<i>Clostridium</i>] <i>sphenoides</i>	19.13242	-0.50646	0.997499	-0.50773	0.611645	0.798122
<i>Propionibacterium virus</i> PHL171M01	11.88012	0.899647	1.77373	0.507207	0.61201	0.798312
<i>Thermoplasmatales archaeon</i> BRNA1	0.662619	-1.48105	2.927519	-0.50591	0.612922	0.799215
<i>Providencia stuartii</i>	9.198884	-0.57157	1.133368	-0.50431	0.614042	0.800389
<i>Bacteroides cellulosilyticus</i>	181.5827	0.394606	0.783105	0.5039	0.614332	0.80048
<i>Vibrio</i> sp. 2521-89	2.017044	-1.35398	2.691102	-0.50313	0.614872	0.800897
[<i>Clostridium</i>] <i>saccharolyticum</i>	31.30099	-0.52635	1.050072	-0.50125	0.616193	0.80166
<i>Magaeibacillus indolicus</i>	34.28434	-0.4958	0.988453	-0.50159	0.615953	0.80166
<i>Psychrobacter</i> sp. P11F6	98.2579	0.409028	0.816164	0.501159	0.616259	0.80166
<i>Oleispira antarctica</i>	7.505624	-0.68794	1.373018	-0.50104	0.61634	0.80166
<i>Bacillus lentus</i>	10.86574	-0.55422	1.107239	-0.50054	0.616696	0.801837
<i>Carnobacterium divergens</i>	81.83107	-0.33385	0.667413	-0.50022	0.616923	0.801846
<i>Corynebacterium pseudotuberculosis</i>	315.54	0.190581	0.381286	0.499838	0.617189	0.801905

Flavobacterium sp. MEBiC07310	6.653669	-0.72055	1.442635	-0.49947	0.617448	0.801955
Halocynthiibacter arcticus	7.094612	0.509057	1.020023	0.499064	0.617734	0.80204
Spirosoma pollinicola	38.27018	-0.27172	0.54533	-0.49827	0.618296	0.802483
Thermosiphon melanesiensis	1.369305	-1.41705	2.85682	-0.49602	0.619878	0.803239
Stenotrophomonas sp. WZN-1	29.8104	-0.54856	1.106193	-0.4959	0.619965	0.803239
Nocardia sp. Y48	158.6193	-0.20153	0.405688	-0.49676	0.619356	0.803239
Thermodesulfobium acidiphilum	1.346752	-1.42779	2.874727	-0.49667	0.619421	0.803239
Psychromicrobium lacuslunae	55.0459	-0.2989	0.60277	-0.49588	0.619982	0.803239
Pseudomonas mandelii	79.13098	0.355142	0.716905	0.495382	0.62033	0.803404
[Haemophilus] ducreyi	22.73873	-0.3222	0.651967	-0.49419	0.621171	0.80392
Candidatus Cyclonatronum proteinivorun	4.7669	-0.67094	1.357642	-0.4942	0.621168	0.80392
Aerococcus sanguinicola	6.280024	-0.51512	1.044227	-0.49331	0.621796	0.804443
Pseudoalteromonas donghaensis	2.725299	-0.94019	1.909757	-0.49231	0.622501	0.804746
Natronomonas pharaonis	5.895068	-0.63375	1.288006	-0.49204	0.622693	0.804746
Thermosulfidibacter takaii	1.795986	-0.95252	1.933986	-0.49251	0.622355	0.804746
Novosphingobium sp. THN1	73.73779	-0.23375	0.475919	-0.49115	0.62332	0.805042
Planococcus plakortidis	7.587014	-0.76324	1.554183	-0.49109	0.623365	0.805042
Plantactinospira sp. KBS50	87.59407	-0.24007	0.489691	-0.49024	0.623964	0.80531
Bacillus kochii	7.502631	0.539123	1.099875	0.490167	0.624015	0.80531
Dokdonia sp. PRO95	0.638415	-1.43407	2.927788	-0.48981	0.624266	0.805347
Erythrobacter sp. KY5	16.03805	-0.39494	0.807168	-0.4893	0.624632	0.805438
Leptospirillum ferriphilum	2.147631	1.301139	2.66062	0.489036	0.624816	0.805438
cyanobacterium endosymbiont of Rhopal	3.970923	0.991613	2.028768	0.488776	0.625	0.805438
Sulfurospirillum cavolei	1.298506	-1.27001	2.601514	-0.48818	0.62542	0.805694
Corynebacterium sp. ATCC 6931	8568.576	-0.30494	0.626011	-0.48711	0.62618	0.806386
Paenibacillus yonginensis	4.750685	0.744063	1.52902	0.486627	0.626523	0.806543
Shinella sp. HZN7	273.6014	-0.26706	0.549991	-0.48558	0.627268	0.806931
Raphidiopsis curvata	1.089146	-1.3105	2.698131	-0.48571	0.627174	0.806931
Lactococcus virus CB13	10.57659	-0.80388	1.660663	-0.48407	0.628337	0.808021
Antarctobacter heliothermus	25.48678	-0.3153	0.65237	-0.48331	0.628876	0.80833
Anaerotignum propionicum	7.553672	-0.55931	1.157748	-0.4831	0.629022	0.80833
Pontibacter actinarum	22.72943	-0.32731	0.679196	-0.4819	0.629876	0.809141
Pseudoxanthomonas suwonensis	207.9272	-0.20793	0.432243	-0.48105	0.630482	0.809634
Desulfitobacterium dehalogenans	1.942708	-0.91255	1.900729	-0.48011	0.631151	0.810207
Dehalococcoides mccartyi	19.26051	-0.49338	1.030464	-0.47879	0.632087	0.81085
Psychrobacter sp. P11G5	35.75393	-0.44504	0.929533	-0.47878	0.632097	0.81085
Syntrophomonas wolfei	8.446063	0.619959	1.301371	0.476389	0.633797	0.812393
Flavobacterium album	16.85387	-0.28347	0.595088	-0.47635	0.633826	0.812393
Mycoplasma californicum	1.019237	-1.30062	2.731554	-0.47615	0.63397	0.812393
Methylobacterium radiotolerans	141.4352	-0.32113	0.676173	-0.47492	0.634842	0.813057
Micrococcus luteus	51832.1	-0.27679	0.582967	-0.47479	0.634935	0.813057
Rothia mucilaginosa	3759.909	-0.27916	0.588643	-0.47424	0.635329	0.813275
Roseovarius mucosus	6.695105	-0.67004	1.41943	-0.47205	0.636894	0.813291
Moraxella ovis	3.157621	1.329568	2.820618	0.471375	0.637373	0.813291
Gloeocapsa sp. PCC 7428	4.531762	-0.68236	1.44235	-0.47309	0.63615	0.813291
Methanobrevibacter smithii	22.83093	0.551183	1.166107	0.472669	0.636449	0.813291
Streptomyces sp. M56	28.46748	-0.58021	1.230553	-0.4715	0.637283	0.813291
Paenibacillus kribbensis	7.966506	0.525507	1.11127	0.472888	0.636293	0.813291
Capnocytophaga sp. oral taxon 878	23.58313	-0.35568	0.753713	-0.47191	0.636993	0.813291
Moraxella catarrhalis	31.67149	-0.47063	0.998947	-0.47113	0.637547	0.813291

Oceanobacillus iheyensis	23.34056	-0.41718	0.883042	-0.47244	0.636615	0.813291
Candidatus Methanomassiliicoccus intest	1.200894	1.018595	2.162211	0.471089	0.637577	0.813291
Acinetobacter sp. WCHAc010005	10.05454	-0.54591	1.159841	-0.47067	0.637874	0.813384
Aliivibrio fischeri	12.41464	0.493392	1.051542	0.469208	0.638921	0.813867
Lactobacillus bombi	3.798509	-0.6739	1.436267	-0.4692	0.638924	0.813867
Thermanaeromonas toyohensis	1.499828	-1.09297	2.328059	-0.46948	0.638727	0.813867
Ornithinimicrobium sp. AMA3305	201.8128	-0.177	0.378665	-0.46742	0.640196	0.815203
Pseudoalteromonas rubra	0.990567	-1.36545	2.923281	-0.4671	0.640431	0.815217
Lactobacillus oligofermentans	3.522882	-0.70627	1.514038	-0.46648	0.640869	0.815489
Kocuria sp. BT304	1491.664	-0.2738	0.590519	-0.46366	0.642892	0.81656
Polynucleobacter wuianus	1.184696	1.213944	2.615294	0.464171	0.642525	0.81656
Enterobacteriaceae bacterium ENNIH1	2.454953	-1.02976	2.229316	-0.46192	0.644142	0.81656
Aneurinibacillus soli	2.472364	-0.87736	1.891001	-0.46397	0.642671	0.81656
Prevotella intermedia	861.5035	-0.21086	0.456099	-0.46231	0.643862	0.81656
Paenibacillus sp. FSL P4-0081	16.52379	-0.5006	1.080822	-0.46317	0.643244	0.81656
Propionibacterium virus PHL199M00	4.288633	-0.92086	1.991579	-0.46238	0.64381	0.81656
Peptostreptococcaceae bacterium oral ta	895.5748	0.258033	0.558671	0.461869	0.644175	0.81656
Pseudomonas lurida	28.83756	-0.57111	1.235252	-0.46234	0.643837	0.81656
Mogibacterium pumilum	65.40483	0.330515	0.713713	0.463092	0.643298	0.81656
Dermatophilus congolensis	63.49781	-0.23767	0.514581	-0.46186	0.64418	0.81656
Thermoproteus uzoniensis	5.390044	0.758625	1.655034	0.458374	0.646684	0.819266
Listeria ivanovii	14.3437	-0.407	0.888144	-0.45826	0.646765	0.819266
Desulfotomaculum ferrireducens	1.696962	-1.05127	2.300077	-0.45706	0.64763	0.820076
Actinosynnema mirum	32.76583	-0.97924	2.145642	-0.45639	0.648113	0.820258
Azospirillum sp. M2T2B2	81.23121	-0.29523	0.647418	-0.45601	0.648386	0.820258
Myroides odoratus	13.35885	0.485648	1.065212	0.455917	0.64845	0.820258
Geitlerinema sp. PCC 7407	31.299	-0.32057	0.703962	-0.45537	0.64884	0.820466
Campylobacter fetus	13.79167	0.53518	1.176672	0.454825	0.649235	0.82068
Sphingorhabdus sp. Alg231-15	5.091144	-0.57669	1.269546	-0.45425	0.649647	0.820916
Lactobacillus coryniformis	3.876434	-0.65431	1.4458	-0.45256	0.650865	0.821653
Glaciecola sp. THG-3.7	5.117115	-0.61126	1.351786	-0.45219	0.651134	0.821653
Myroides odoratimimus	3.013234	1.273259	2.814087	0.452459	0.650938	0.821653
Ochrobactrum anthropi	133.2418	-0.31016	0.685458	-0.45248	0.650922	0.821653
Enterobacter cancerogenus	31.26337	-0.32457	0.718514	-0.45173	0.651463	0.821714
Propionibacterium virus PHL132N00	42.83777	0.663517	1.469607	0.451493	0.651634	0.821714
Flavobacterium psychrophilum	17.37316	0.339216	0.752053	0.451054	0.651951	0.821829
Virgibacillus sp. 6R	11.6115	0.469778	1.043746	0.450089	0.652646	0.822166
Lactobacillus fuchuensis	4.460496	-0.85109	1.892405	-0.44974	0.652897	0.822166
Acidipropionibacterium acidipropionici	202.3756	-0.18083	0.402011	-0.44982	0.65284	0.822166
Aureitalea sp. RR4-38	2.907435	-0.7365	1.638824	-0.4494	0.65314	0.822187
Moorea producens	8.931183	0.440676	0.983403	0.448113	0.654071	0.823076
Stenotrophomonas maltophilia	1932.217	-0.24103	0.539477	-0.44678	0.655036	0.823944
Clostridium cochlearium	13.63619	0.468813	1.049904	0.44653	0.655215	0.823944
Marinomonas primoryensis	4.04344	0.61365	1.379738	0.444759	0.656494	0.82479
Methanoculleus bourgensis	1.341292	1.260675	2.835163	0.444657	0.656568	0.82479
Acholeplasma palmae	9.308053	0.510562	1.147019	0.445121	0.656233	0.82479
Xanthomonas vasicola	86.14042	-0.36072	0.812668	-0.44387	0.657136	0.825219
Staphylococcus warneri	2393.172	-0.19217	0.434651	-0.44212	0.658406	0.826528
Paenisporosarcina sp. K2R23-3	4.603728	-0.59755	1.357931	-0.44005	0.659903	0.828122
Nonlabens dokdonensis	1.221663	-1.27325	2.916629	-0.43655	0.662439	0.828576

Bacillus horikoshii	7.035813	0.507452	1.163547	0.436125	0.662746	0.828576
Pseudomonas putida	1796.852	-0.23966	0.546346	-0.43866	0.660908	0.828576
Alcaligenes aquatilis	30.29324	-0.35556	0.813517	-0.43706	0.662065	0.828576
Anabaena cylindrica	8.771001	0.649584	1.486121	0.437101	0.662038	0.828576
Pseudomonas sp. LG1D9	37.57962	-0.23913	0.547475	-0.4368	0.662259	0.828576
Streptomyces bacillaris	52.03756	-0.41366	0.94796	-0.43637	0.66257	0.828576
Raoultella ornithinolytica	119.053	-0.26741	0.613638	-0.43578	0.662997	0.828576
Streptococcus phage EJ-1	1.202745	-1.15461	2.64796	-0.43604	0.662809	0.828576
Caldicellulosiruptor owensensis	2.307464	-0.97177	2.214634	-0.43879	0.660811	0.828576
Vitreoscilla sp. C1	19.86299	-0.43513	0.994148	-0.43769	0.661609	0.828576
Listeria seeligeri	1.583479	-0.92199	2.11535	-0.43586	0.662942	0.828576
Acinetobacter venetianus	264.8922	-0.25255	0.580349	-0.43518	0.663435	0.828838
Staphylococcus nepalensis	200.5516	-0.25554	0.587768	-0.43477	0.66373	0.828923
secondary endosymbiont of Trabutina ma	1.985765	1.179573	2.716892	0.434163	0.66417	0.829187
Marinomonas posidonica	5.400253	0.559429	1.293843	0.432378	0.665467	0.830521
Pseudomonas sp. VLB120	0.562255	-1.26462	2.928832	-0.43178	0.665899	0.830683
Acholeplasma brassicae	8.45122	0.498069	1.154085	0.431571	0.666053	0.830683
Bacillus beveridgei	2.942051	-0.60999	1.414815	-0.43115	0.666362	0.830783
Methylobacterium sp. AMS5	55.09626	-0.2513	0.583831	-0.43044	0.666879	0.831142
Clostridium sp. SY8519	13.04648	-0.4324	1.013602	-0.4266	0.669672	0.832627
Buttiauxella sp. 3AFRM03	12.09545	-0.51278	1.200016	-0.42731	0.669153	0.832627
Pectobacterium wasabiae	4.836649	-0.62304	1.459866	-0.42678	0.669542	0.832627
Rhodococcus jostii	92.09618	-0.19273	0.451515	-0.42686	0.669482	0.832627
Candidatus Pantoea carbekii	0.915653	-1.1896	2.783009	-0.42745	0.669052	0.832627
Anaerococcus mediterraneensis	907.6782	0.187063	0.438484	0.426614	0.669661	0.832627
Legionella sainthelensi	3.934557	0.868652	2.029334	0.428048	0.668616	0.832627
Siansivirga zeaxanthinifaciens	4.632705	-0.61316	1.446065	-0.42402	0.671551	0.834393
Oceanisphaera avium	2.301972	-0.81228	1.915548	-0.42405	0.671533	0.834393
Nodularia spumigena	8.221517	-0.58608	1.386823	-0.42261	0.672581	0.835102
Nonlabens sp. MB-3u-79	3.632723	-0.738	1.746024	-0.42267	0.672533	0.835102
Croceibacter atlanticus	2.658903	-0.65203	1.544036	-0.42229	0.672815	0.835108
Pelobacter propionicus	36.60889	-0.22672	0.537585	-0.42174	0.673218	0.835323
Salegentibacter sp. T436	8.551377	-0.55435	1.31738	-0.4208	0.673901	0.835675
Pseudomonas sp. O2C 26	105.8297	-0.25555	0.607403	-0.42072	0.673961	0.835675
Geobacillus sp. WCH70	6.4422	-0.63435	1.511351	-0.41973	0.674685	0.836003
Pseudoalteromonas espejiana	0.554294	-1.22985	2.929062	-0.41988	0.674574	0.836003
Tepidanaerobacter acetatoxydans	5.625683	-0.50317	1.202737	-0.41835	0.675689	0.836393
Sporosarcina ureae	22.14516	-0.33139	0.791843	-0.4185	0.67558	0.836393
Candidatus Thioglobus singularis	19.61974	0.396696	0.947605	0.41863	0.675486	0.836393
Brevefilum fermentans	1.603207	0.961709	2.300675	0.418012	0.675939	0.836417
Staphylococcus phage 23MRA	40.2809	1.118856	2.679201	0.417608	0.676234	0.836419
Rhizorhabdus dicambivorans	123.3177	-0.24077	0.576863	-0.41738	0.6764	0.836419
Chryseobacterium nakagawai	18.03935	-0.44328	1.066556	-0.41562	0.677691	0.837445
Acinetobacter sp. WCHAc010034	30.67336	-0.2925	0.703653	-0.41569	0.677638	0.837445
Marivirga tractuosa	9.940672	0.403531	0.973227	0.414632	0.678411	0.837482
Leptolyngbya sp. PCC 7376	3.073436	-0.62788	1.513161	-0.41495	0.678181	0.837482
Acinetobacter radioresistens	134.736	0.28547	0.688321	0.414734	0.678337	0.837482
Staphylococcus phage StB20-like	10.11315	-0.60125	1.455854	-0.41299	0.679617	0.837635
Campylobacter coli	10.38136	0.469716	1.134424	0.414057	0.678832	0.837635
Corynebacterium aurimucosum	9707.951	-0.129	0.312437	-0.41289	0.679686	0.837635

Candidatus Desulfofervidus auxilii	2.387595	-1.00327	2.427122	-0.41336	0.679343	0.837635
Flavobacterium branchiophilum	14.38768	0.366452	0.887012	0.413131	0.67951	0.837635
Lactococcus phage P680	12.48882	-0.73851	1.800732	-0.41012	0.681719	0.839382
Echinicola vietnamensis	8.576001	-0.4268	1.039821	-0.41046	0.681469	0.839382
Streptococcus cristatus	800.5137	-0.26853	0.654927	-0.41001	0.681796	0.839382
Brachybacterium sp. VM2412	277.2307	-0.19295	0.471825	-0.40895	0.682579	0.839494
Tenericutes bacterium MZ-XQ	1.465948	-0.95193	2.327272	-0.40903	0.682517	0.839494
Micromonospora sp. B006	56.93498	-0.21776	0.532471	-0.40895	0.682573	0.839494
Acetobacter pasteurianus	6.263376	-0.61766	1.516003	-0.40743	0.683696	0.840299
Listeria monocytogenes	72.50805	0.193545	0.475033	0.407436	0.683688	0.840299
Gramella forsetii	3.130071	-0.62826	1.544367	-0.40681	0.684149	0.840573
Nitrosococcus watsonii	0.533024	-1.19007	2.929332	-0.40626	0.684551	0.840783
Rhodococcus opacus	297.2736	-0.15503	0.382505	-0.40531	0.685251	0.841358
Proteus vulgaris	19.5825	0.388644	0.960321	0.404703	0.685696	0.84162
Staphylococcus epidermidis	69970.97	0.208981	0.517213	0.404052	0.686175	0.841924
Psychrobacter sp. YP14	10.40953	0.636004	1.583414	0.401666	0.68793	0.843792
Betapapillomavirus 4	5.435792	-0.68381	1.706102	-0.4008	0.688567	0.844289
Aequorivita sublithincola	4.040952	0.701405	1.754581	0.399756	0.689336	0.844947
Streptomyces koyangensis	53.5773	-0.22596	0.566234	-0.39905	0.689855	0.845299
Pedobacter ginsengisoli	26.07781	-0.25791	0.647733	-0.39818	0.6905	0.845804
Prevotella melaninogenica	951.2611	-0.18361	0.462534	-0.39696	0.691399	0.84662
Sphingopyxis granuli	119.0801	-0.31185	0.789682	-0.3949	0.692914	0.846981
Taylorella equigenitalis	2.323634	0.889749	2.249631	0.395509	0.692467	0.846981
Bordetella parapertussis	3.81815	-0.98665	2.50398	-0.39403	0.693556	0.846981
Enterococcus cecorum	12.45314	-0.37797	0.955352	-0.39563	0.692377	0.846981
Mordavella sp. Marseille-P3756	35.76909	-0.46562	1.180176	-0.39453	0.693188	0.846981
Nostoc sp. NIES-4103	25.5645	0.348954	0.885276	0.394175	0.693452	0.846981
Draconibacterium orientale	10.3725	0.396592	1.004192	0.394936	0.69289	0.846981
Psychromonas ingrahamii	9.734738	-0.41014	1.039845	-0.39442	0.69327	0.846981
Thermoanaerobacterium sp. RBIITD	7.850871	0.426837	1.086098	0.393001	0.694319	0.847036
Methanobacterium paludis	0.662725	1.14661	2.928878	0.391485	0.695439	0.847036
Acetomicrobium mobile	1.229395	-0.94392	2.406708	-0.3922	0.694909	0.847036
Candidatus Saccharibacteria bacterium YI	0.993982	-1.07002	2.724467	-0.39274	0.694508	0.847036
Marivivens sp. JLT3646	4.715202	-0.56469	1.443424	-0.39122	0.695635	0.847036
Trichormus azollae	5.588451	0.649212	1.659807	0.391137	0.695696	0.847036
Microbacterium sp. 1.5R	41.06352	-0.35192	0.894955	-0.39323	0.694151	0.847036
Lelliottia amnigena	63.09362	-0.25744	0.657942	-0.39128	0.695588	0.847036
Vibrio owensii	1.784425	-1.07715	2.747139	-0.3921	0.694984	0.847036
Paenibacillus sp. FSL H7-0737	0.665872	1.138581	2.928688	0.388768	0.697448	0.847243
Acinetobacter baumannii	747.447	0.195727	0.501684	0.390139	0.696434	0.847243
Staphylococcus phage IME-SA4	27.51637	-0.35532	0.915521	-0.38811	0.697938	0.847243
Desulfovibrio alaskensis	13.36393	-0.46249	1.193693	-0.38744	0.698428	0.847243
Shewanella sediminis	5.59329	-0.60259	1.545995	-0.38977	0.696704	0.847243
Auricoccus indicus	42.39638	0.311731	0.803976	0.387737	0.69821	0.847243
Fusobacterium mortiferum	12.80514	0.320127	0.825205	0.387937	0.698063	0.847243
Leclercia sp. LSNIH3	82.56483	-0.47124	1.209887	-0.38949	0.696913	0.847243
Dehalobacterium formicoaceticum	8.429786	-0.47457	1.224407	-0.3876	0.698316	0.847243
Colwellia beringensis	2.032971	-0.81078	2.090026	-0.38793	0.69807	0.847243
Prevotella sp. oral taxon 299	113.1274	-0.21982	0.566852	-0.3878	0.698165	0.847243
Propionibacterium acidifaciens	267.7228	-0.20487	0.530063	-0.3865	0.699125	0.847574

Helicobacter apodemus	2.799473	-0.68606	1.775312	-0.38644	0.699167	0.847574
Desulfovibrio piger	20.92251	-0.23294	0.603677	-0.38587	0.699595	0.84781
Staphylococcus virus CNPH82	43.03032	0.450351	1.169884	0.384953	0.700272	0.848348
Microbacterium aurum	709.44	-0.22368	0.581882	-0.38441	0.700678	0.84838
Flavobacterium magnum	4.517698	-0.51298	1.335773	-0.38403	0.700956	0.84838
Erythrobacter seohaensis	20.61385	0.222356	0.580496	0.383045	0.701686	0.84838
Bifidobacterium bifidum	127.2458	-0.21289	0.555799	-0.38303	0.701697	0.84838
Natranaerobius thermophilus	6.097417	0.560182	1.461716	0.383236	0.701545	0.84838
Corynebacterium phocae	1445.803	0.09162	0.238768	0.383721	0.701185	0.84838
Octadecabacter temperatus	1.881912	-0.73633	1.925837	-0.38234	0.702208	0.848715
Bifidobacterium breve	133.9996	0.169788	0.444471	0.382001	0.702461	0.848739
Listeria welshimeri	2.14042	0.78537	2.06289	0.380714	0.703416	0.849328
Propionibacterium virus Stormborn	11.89137	-0.63485	1.666206	-0.38102	0.703192	0.849328
Bacillus vallismortis	1.46372	-0.97391	2.563381	-0.37993	0.703997	0.849554
Peptoniphilus sp. ING2-D1G	109.1973	0.21751	0.573121	0.379518	0.704303	0.849554
Paenibacillus sp. FSL R7-0273	8.103476	-0.47198	1.243117	-0.37967	0.704188	0.849554
Staphylococcus equorum	128.1794	-0.21706	0.573986	-0.37817	0.705307	0.849881
Staphylococcus phage CNP _x	56.69054	0.939611	2.483417	0.378354	0.705168	0.849881
Anoxybacillus amylolyticus	5.134641	-0.501	1.326909	-0.37757	0.705753	0.849881
Arthrobacter sp. PGP41	98.4063	-0.13028	0.345333	-0.37727	0.705976	0.849881
Betapapillomavirus 6	4.070401	-0.7675	2.033819	-0.37737	0.7059	0.849881
Pseudomonas sp. StFLB209	71.68849	-0.22247	0.589034	-0.37768	0.705665	0.849881
Planococcus maritimus	1.866382	0.787259	2.091779	0.376359	0.70665	0.850085
Capnocytophaga canimorsus	16.86138	0.310874	0.827277	0.37578	0.70708	0.850085
Actinobacillus succinogenes	4.567807	0.587954	1.561255	0.376591	0.706478	0.850085
Vibrio crassostreae	3.510364	0.819453	2.179713	0.375945	0.706958	0.850085
Candidatus Nitrosoglobus terrae	3.958829	0.573307	1.528175	0.375158	0.707543	0.85036
Polaribacter sp. MED152	12.43537	-0.44149	1.184879	-0.3726	0.709442	0.851799
Cohnella sp. 18JY8-7	22.79346	-0.23208	0.622755	-0.37266	0.709402	0.851799
Cyanothece sp. PCC 7425	5.52233	-0.51213	1.373599	-0.37284	0.709268	0.851799
Desulfotomaculum ruminis	2.557323	-0.61077	1.645554	-0.37116	0.710517	0.852808
Flavobacteriaceae bacterium MAR_2010_	3.078502	0.65001	1.753237	0.370748	0.710825	0.852851
Syntrophobotulus glycolicus	1.533232	-0.93853	2.533252	-0.37048	0.711022	0.852851
Mycobacterium intracellulare	145.1481	-0.23247	0.630884	-0.36848	0.712517	0.85293
Winogradskyella sp. PG-2	7.551654	0.436228	1.183245	0.368671	0.712373	0.85293
Mycoplasma hyosynoviae	0.258975	1.084688	2.940784	0.368843	0.712245	0.85293
Streptococcus thermophilus	1137.745	-0.22135	0.60221	-0.36757	0.713197	0.85293
Serratia liquefaciens	53.95808	0.257354	0.697834	0.36879	0.712284	0.85293
Bifidobacterium coryneforme	3.227887	-0.8062	2.185865	-0.36883	0.712258	0.85293
Microbacterium sp. ABRD_28	143.1606	-0.1761	0.478608	-0.36794	0.712917	0.85293
Mucilaginibacter sp. BJC16-A31	27.83651	-0.25988	0.706744	-0.36771	0.713091	0.85293
Brevibacillus formosus	5.708581	-0.49708	1.351854	-0.3677	0.713093	0.85293
Sphingobacterium sp. ML3W	37.3723	-0.28845	0.785977	-0.36699	0.713627	0.853163
Gordonia sp. KTR9	461.5452	-0.20427	0.557433	-0.36646	0.714025	0.853311
Yersinia enterocolitica	53.37497	0.192746	0.526347	0.366195	0.71422	0.853311
Pseudoclostridium thermosuccinogenes	6.805193	0.503231	1.37801	0.365187	0.714972	0.853929
Blautia sp. N6H1-15	56.16492	0.315815	0.8666	0.36443	0.715537	0.854323
Nonlabens sp. Hel1_33_55	3.480455	-0.5147	1.416205	-0.36344	0.716277	0.854927
Lactobacillus amylophilus	1.80942	-0.76678	2.114866	-0.36256	0.71693	0.855425
Tenacibaculum sp. SZ-18	13.45799	0.314011	0.86895	0.361368	0.717824	0.855931

Actinomyces sp. oral taxon 897	225.2534	-0.14814	0.409929	-0.36137	0.71782	0.855931
Human papillomavirus	2.12499	-0.97259	2.702413	-0.3599	0.718924	0.856961
Paenibacillus sp. IHBB 10380	2.272524	-0.63049	1.756435	-0.35896	0.719624	0.857027
Thermoclostridium stercorarium	4.151249	-0.54519	1.518001	-0.35915	0.719482	0.857027
Ralstonia phage 1 NP-2014	2.31767	0.954655	2.660107	0.358878	0.719686	0.857027
Brachybacterium sp. P6-10-X1	325.3151	-0.16604	0.465204	-0.35693	0.721145	0.858484
Ochrobactrum pseudogrignonense	29.83758	-0.32724	0.920558	-0.35547	0.722234	0.859498
Staphylococcus phage StB27	26.31108	0.28699	0.810572	0.354058	0.723295	0.86048
Synechococcus sp. PCC 7502	0.936659	-0.80057	2.263547	-0.35368	0.72358	0.860537
Propionibacterium virus PAD20	16.67764	0.493888	1.3999	0.352803	0.724236	0.860674
Bdellovibrio exovorus	1.356188	-0.91383	2.594049	-0.35228	0.724628	0.860674
Streptococcus pyogenes	323.1394	0.162686	0.461832	0.352263	0.724641	0.860674
Geosporobacter ferrireducens	10.44396	0.316526	0.896382	0.353115	0.724002	0.860674
Paracoccus sp. CBA4604	133.4598	-0.198	0.565386	-0.3502	0.726187	0.861948
Desulfosporosinus youngiae	6.661576	-0.34973	0.998362	-0.3503	0.726114	0.861948
Kocuria flava	634.8743	-0.1648	0.471692	-0.34938	0.726807	0.862121
Mycobacterium sp. KMS	5.502408	-0.92704	2.651648	-0.34961	0.726631	0.862121
Lactococcus virus SI4	14.29614	-0.50072	1.434889	-0.34896	0.727119	0.86221
Scytonema sp. HK-05	19.00205	-0.34185	0.9814	-0.34833	0.727596	0.862494
Leminorella richardii	10.91454	-0.3085	0.889819	-0.3467	0.728813	0.863655
Acinetobacter wuhouensis	58.84893	0.250636	0.733856	0.341533	0.732703	0.864905
Flavobacterium kingsejongi	8.16623	-0.37042	1.079408	-0.34317	0.731472	0.864905
Lactococcus phage 340	4.770429	0.745437	2.166274	0.34411	0.730763	0.864905
Propionibacterium virus P91	26.18515	-0.50455	1.479418	-0.34104	0.733071	0.864905
Hafnia alvei	15.54678	-0.46558	1.35444	-0.34374	0.73104	0.864905
Celeribacter baekdonensis	15.9752	-0.23219	0.68019	-0.34137	0.732827	0.864905
Komagataeibacter hansenii	22.79728	-0.25366	0.744149	-0.34088	0.733196	0.864905
Leptospira alstonii	0.517818	1.003826	2.931288	0.342452	0.732011	0.864905
Adlercreutzia equolifaciens	117.8724	-0.23051	0.672837	-0.3426	0.731902	0.864905
Enterobacter bugandensis	1.799966	-0.94077	2.746922	-0.34248	0.731988	0.864905
Riemerella anatipestifer	18.85493	-0.26435	0.77252	-0.3422	0.732202	0.864905
Pseudarthrobacter equi	109.3067	-0.16306	0.475409	-0.34299	0.731607	0.864905
[Eubacterium] cellulosolvans	10.2004	-0.38249	1.121647	-0.34101	0.7331	0.864905
Escherichia fergusonii	1.336828	-0.89196	2.599188	-0.34317	0.731471	0.864905
Photobacterium damsela	25.30255	-0.33213	0.975807	-0.34037	0.73358	0.864913
Pseudoxanthomonas spadix	116.5554	-0.19122	0.562033	-0.34024	0.733678	0.864913
Lactococcus piscium	87.43901	0.260574	0.767942	0.339314	0.734373	0.864968
Lactobacillus salivarius	58.43129	-0.16716	0.492554	-0.33937	0.734332	0.864968
Propionibacterium virus PAS50	16.76842	-0.52509	1.548492	-0.3391	0.734538	0.864968
Geobacillus genomosp. 3	6.85436	-0.48842	1.441133	-0.33891	0.734676	0.864968
Corynebacterium camporealensis	3742.403	0.084052	0.248643	0.338043	0.735331	0.865179
Acinetobacter oleivorans	9.393146	0.382081	1.129561	0.338256	0.73517	0.865179
Sphingomonas sp. JJ-A5	53.70034	-0.19626	0.581233	-0.33765	0.735623	0.865244
Shewanella piezotolerans	2.161896	-0.55115	1.644837	-0.33508	0.737564	0.866643
Thermosynechococcus elongatus	1.829159	-0.9194	2.742904	-0.33519	0.737481	0.866643
Meiothermus silvanus	34.64527	-0.23742	0.709104	-0.33481	0.737766	0.866643
Corynebacterium mustelae	343.1072	0.133657	0.398874	0.335085	0.737561	0.866643
Psychrobacter urativorans	14.30522	-0.32499	0.973502	-0.33384	0.738502	0.866948
Lactobacillus agilis	1.849668	-0.64767	1.938666	-0.33408	0.73832	0.866948
Kocuria rhizophila	1687.751	-0.19642	0.589049	-0.33345	0.738798	0.867015

Moraxellaceae bacterium HYN0046	5.869717	-0.40214	1.211618	-0.33191	0.739961	0.8681
Curtobacterium sp. BH-2-1-1	170.9624	-0.1701	0.513756	-0.33109	0.740574	0.868155
Molluscum contagiosum virus	1960.54	-0.95571	2.88545	-0.33122	0.740479	0.868155
Pantoea agglomerans	132.2173	-0.16228	0.490424	-0.3309	0.740724	0.868155
[Eubacterium] eligens	68.2932	-0.26605	0.807636	-0.32942	0.741836	0.869178
Formosa sp. Hel3_A1_48	0.794051	-0.95999	2.925005	-0.3282	0.74276	0.869981
Calothrix sp. 336/3	1.0527	-0.72868	2.225064	-0.32749	0.743298	0.870331
Vibrio tubiashii	20.1613	-0.3862	1.18726	-0.32529	0.744965	0.871721
Aeribacillus pallidus	8.384233	0.455592	1.400244	0.325366	0.744904	0.871721
Pantoea sp. At-9b	45.32989	-0.25322	0.779403	-0.32489	0.745264	0.871792
Brachybacterium ginsengisoli	370.2868	-0.16982	0.524641	-0.3237	0.746168	0.872569
Sulfurospirillum sp. JPD-1	2.030402	-0.72897	2.260476	-0.32248	0.747086	0.873361
Polaribacter sp. ALD11	6.041439	0.506428	1.571994	0.322157	0.747334	0.87337
Pseudoalteromonas piratica	1.137463	-0.77569	2.413006	-0.32146	0.747859	0.873703
Eubacterium callanderi	6.761203	-0.48803	1.526533	-0.3197	0.749197	0.874705
Bacillus cytotoxicus	12.72863	-0.35487	1.109746	-0.31978	0.749138	0.874705
Microbacterium sp. str. 'China'	91.70893	-0.28348	0.888541	-0.31904	0.749695	0.875005
Microbacterium pygmaeum	138.4435	-0.16734	0.525119	-0.31867	0.749976	0.875052
Tenacibaculum dicentrarchi	5.944101	0.439684	1.384357	0.317609	0.750782	0.875711
Propionibacterium virus PHL070N00	8.135893	-0.40918	1.291777	-0.31675	0.75143	0.876187
Roseomonas sp. FDAARGOS_362	469.2555	-0.1723	0.5454	-0.31592	0.752062	0.876481
Propionibacterium virus P105	16.28056	0.555653	1.759583	0.315787	0.752165	0.876481
Psychroflexus torquis	4.720232	0.491661	1.560405	0.315085	0.752697	0.87677
Bacteroides helcogenes	63.47245	-0.32283	1.025432	-0.31483	0.752894	0.87677
Spiroplasma turonicum	3.19777	0.595776	1.90036	0.313507	0.753895	0.877655
Cyclobacterium marinum	13.66284	-0.29351	0.945837	-0.31032	0.756317	0.87991
Maribacter sp. HTCC2170	6.279063	-0.38133	1.228214	-0.31048	0.756197	0.87991
Dictyoglomus turgidum	1.836866	0.702044	2.274312	0.308684	0.757562	0.880796
Mesoplasma entomophilum	1.111116	-0.9016	2.919999	-0.30877	0.757499	0.880796
Moraxella bovis	8.193335	-0.30673	1.000447	-0.30659	0.759152	0.882363
Jannaschia sp. CCS1	14.69472	-0.22114	0.723993	-0.30545	0.760026	0.882862
Kosmotoga olearia	0.664504	-0.89217	2.927015	-0.30481	0.760513	0.882862
Sulfurospirillum sp. UCH001	2.804422	0.545219	1.7866	0.305171	0.760236	0.882862
Pseudoalteromonas phenolica	2.531041	-0.58113	1.906857	-0.30476	0.760552	0.882862
Planococcus donghaensis	2.63481	-0.62245	2.051209	-0.30345	0.761545	0.883732
Propionibacterium phage PHL082M00	36.36797	0.433693	1.431019	0.303066	0.76184	0.883792
Agarilytica rhodophyticola	4.541484	0.53295	1.764929	0.301967	0.762677	0.884482
Halomicronema hongdechloris	11.17502	-0.3323	1.102436	-0.30143	0.763088	0.884677
Lelliottia jeotgali	10.91962	-0.27125	0.901638	-0.30084	0.763537	0.884915
Basilea psittacipulmonis	5.697791	-0.44049	1.467717	-0.30012	0.764084	0.885267
Treponema putidum	4.180497	0.526013	1.756972	0.299386	0.764646	0.885635
Corynebacterium genitalium	3519.767	-0.14301	0.478734	-0.29873	0.76515	0.885937
Pseudomonas fragi	134.8676	-0.20526	0.689686	-0.29762	0.765996	0.886394
Streptococcus anginosus	724.1063	-0.17088	0.574259	-0.29757	0.766032	0.886394
Lactobacillus ginsenosidimutans	4.663233	-0.40806	1.375543	-0.29665	0.766733	0.886924
Propionibacterium virus Kubed	9.444075	0.769979	2.602923	0.295813	0.767373	0.887381
Providencia sneebia	5.707608	-0.42847	1.451934	-0.29511	0.767913	0.887724
Propionibacterium virus PHL301M00	11.96509	0.777817	2.648215	0.293714	0.768977	0.888671
Labrenzia sp. CP4	3.943818	-0.5809	1.988521	-0.29213	0.770191	0.88938
Candidatus Kinetoplastibacterium galatii	1.057211	-0.71603	2.452561	-0.29195	0.770324	0.88938

Cyclobacterium amurskyense	11.1948	0.307203	1.050462	0.292446	0.769946	0.88938
Caldicellulosiruptor obsidiansis	0.833397	-0.84907	2.923986	-0.29038	0.771524	0.889631
Brevibacterium sandarakinum	274.8613	-0.15512	0.535353	-0.28975	0.772008	0.889631
Candidatus Fukatsuia symbiotica	9.078491	-0.28873	0.994506	-0.29033	0.771565	0.889631
[Clostridium] ultunense	19.49334	0.249002	0.858622	0.290002	0.771815	0.889631
Lactobacillus reuteri	28.73196	-0.22581	0.777128	-0.29058	0.771376	0.889631
Bacillus pseudomycooides	33.90194	0.147313	0.506447	0.290875	0.771147	0.889631
Gammapapillomavirus 13	1.425669	-0.84104	2.916804	-0.28834	0.773084	0.889841
Actinomyces radingae	368.8671	-0.16908	0.585922	-0.28857	0.772909	0.889841
Lactococcus virus ASCC191	9.01762	-0.40452	1.403457	-0.28823	0.773168	0.889841
Candidatus Kuenenia stuttgartiensis	1.083298	-0.63898	2.212264	-0.28884	0.772707	0.889841
Brachybacterium faecium	416.5101	-0.14509	0.505146	-0.28722	0.773947	0.890455
Halohasta litchfieldiae	4.381328	-0.41654	1.455782	-0.28613	0.77478	0.891132
Flagellimonas sp. HME9304	1.009486	-0.77421	2.714235	-0.28524	0.775459	0.891349
Staphylococcus carnosus	44.05527	-0.1794	0.628265	-0.28554	0.775228	0.891349
Desulfosporosinus acidiphilus	1.339012	-0.66733	2.352718	-0.28364	0.776684	0.892475
Legionella fallonii	4.214236	0.501702	1.774616	0.28271	0.777399	0.892556
Ruminiclostridium cellulolyticum	6.810306	0.347803	1.231012	0.282535	0.777534	0.892556
Deinococcus peraridilitoris	32.10695	-0.2263	0.804453	-0.28131	0.778471	0.892556
Photobacterium profundum	9.073615	-0.42048	1.490313	-0.28214	0.777837	0.892556
Propionibacterium phage BruceLethal	1.803165	-0.64013	2.274548	-0.28143	0.778381	0.892556
Lactobacillus kullabergensis	2.694438	0.459428	1.628997	0.282031	0.777919	0.892556
Calothrix sp. PCC 7507	9.040958	-0.42243	1.500072	-0.28161	0.778245	0.892556
Propionibacterium virus Ouroboros	4.795996	0.394316	1.405783	0.280495	0.779097	0.892711
Lactobacillus heilongjiangensis	0.809361	-0.7967	2.839758	-0.28055	0.779053	0.892711
Renibacterium salmoninarum	55.76188	-0.12429	0.444287	-0.27976	0.779661	0.892745
Cellulophaga algicola	10.01987	0.287627	1.02909	0.279497	0.779864	0.892745
Micromonospora coxensis	86.03015	-0.13361	0.477796	-0.27963	0.779759	0.892745
Arenibacter algicola	9.783116	-0.3195	1.145701	-0.27887	0.780343	0.893013
Paenibacillus durus	31.77465	-0.15654	0.562137	-0.27847	0.780651	0.893084
Alkalitalea saponilacus	6.249365	-0.32039	1.152517	-0.27799	0.781017	0.893222
Helicobacter cinaedi	0.877952	0.769373	2.776994	0.277053	0.78174	0.893768
Weissella paramesenteroides	3.062101	0.399824	1.446959	0.27632	0.782302	0.893849
Bacillus mycooides	64.52546	-0.26104	0.944192	-0.27647	0.782187	0.893849
Candidatus Planktophila lacus	7.947788	-0.29516	1.072666	-0.27517	0.783188	0.894581
Chryseobacterium sp. G0201	25.50404	-0.25286	0.925471	-0.27322	0.784684	0.894604
Arcticibacterium luteifluviistationis	6.307467	-0.35412	1.293788	-0.27371	0.784307	0.894604
Mycobacterium chimaera	147.6103	0.163908	0.599635	0.273346	0.784587	0.894604
Gordonia virus Wizard	1.100937	0.798302	2.919675	0.273422	0.784529	0.894604
Pseudomonas sp. s211(2017)	4.218399	-0.59181	2.158516	-0.27417	0.78395	0.894604
Scytonema sp. NIES-4073	2.706011	0.716541	2.6108	0.274453	0.783737	0.894604
Rickettsiales bacterium Ac37b	1.688946	0.75696	2.778805	0.272405	0.785311	0.895038
Marinomonas mediterranea	3.154757	-0.39611	1.46126	-0.27108	0.786332	0.89533
Vibrio splendidus	3.193218	-0.41523	1.540678	-0.26951	0.787536	0.89533
Chryseobacterium carnis	21.41156	0.227458	0.841684	0.270241	0.786975	0.89533
Sulfurovum sp. NBC37-1	1.750248	-0.57309	2.122839	-0.26996	0.787188	0.89533
Hydrogenovibrio crunogenus	0.713269	-0.7856	2.910899	-0.26988	0.787252	0.89533
Staphylococcus phage SAP-2	0.400192	-0.7914	2.932398	-0.26988	0.787252	0.89533
Novibacillus thermophilus	5.460698	-0.34833	1.284893	-0.2711	0.786315	0.89533
Microcoleus sp. PCC 7113	8.51954	-0.29627	1.098341	-0.26975	0.787355	0.89533

Lactobacillus paracasei	44.0379	-0.26394	0.983441	-0.26839	0.788403	0.895756
Obesumbacterium proteus	4.8616	0.408989	1.522189	0.268685	0.788172	0.895756
Staphylococcus agnetis	33.24832	0.131531	0.493212	0.266683	0.789713	0.895774
Leptospira mayottensis	0.72582	-0.76991	2.893021	-0.26613	0.790142	0.895774
Tannerella sp. oral taxon HOT-286	263.3694	-0.15167	0.566254	-0.26785	0.788815	0.895774
Candidatus Kinetoplastibacterium blastoc	2.878667	0.596455	2.23685	0.266649	0.789739	0.895774
Pseudoalteromonas sp. NC201	1.072366	-0.77759	2.920229	-0.26628	0.790026	0.895774
Salinigranum rubrum	18.49469	-0.16012	0.601324	-0.26627	0.790028	0.895774
Corynebacterium simulans	10615.67	0.105379	0.395354	0.266542	0.789822	0.895774
Virgibacillus sp. SK37	4.637859	0.462657	1.74451	0.265207	0.79085	0.896297
Gammapapillomavirus 18	1.398138	-0.75635	2.864845	-0.26401	0.791771	0.897061
Butyrivibrio hungatei	13.75336	-0.33189	1.261629	-0.26306	0.792502	0.897085
Pedobacter sp. G11	28.74779	-0.19407	0.736201	-0.2636	0.792086	0.897085
Rhodococcus sp. NJ-530	206.8558	0.244928	0.931203	0.263024	0.792532	0.897085
Paenibacillus donghaensis	30.57358	-0.17458	0.671555	-0.25997	0.79489	0.899474
Mucilagibacter sp. PAMC 26640	24.51211	-0.18446	0.716055	-0.2576	0.796715	0.90092
Caldanaerobacter subterraneus	1.567614	-0.55051	2.13916	-0.25735	0.796911	0.90092
Streptococcus sp. A12	144.5661	-0.13957	0.542072	-0.25747	0.796815	0.90092
Phoenicibacter massiliensis	8.176814	-0.27891	1.094901	-0.25474	0.798924	0.902916
Turicibacter sp. H121	12.06865	-0.30747	1.210395	-0.25402	0.79948	0.902983
Propionibacterium virus PHL179M00	10.90758	-0.44387	1.746578	-0.25414	0.799389	0.902983
Candidatus Protochlamydia naegleriophil	2.108153	-0.48067	1.910329	-0.25162	0.801337	0.904099
Sphingopyxis sp. LPB0140	3.987437	0.341408	1.35773	0.251455	0.801462	0.904099
Fischerella sp. NIES-4106	6.680703	0.297946	1.183883	0.251668	0.801298	0.904099
Gottschalkia acidurici	19.77488	0.18347	0.728464	0.251859	0.80115	0.904099
Bacillus filamentosus	15.67375	-0.18633	0.748459	-0.24895	0.8034	0.905607
Chryseobacterium carnipullorum	37.84222	0.161452	0.647631	0.249297	0.803131	0.905607
Methanosarcina thermophila	2.246237	0.608103	2.444522	0.248761	0.803545	0.905607
Psychromonas sp. CNPT3	7.610134	-0.30971	1.250117	-0.24774	0.804332	0.906213
Spiroplasma clarkii	1.943258	0.51901	2.097725	0.247416	0.804587	0.906219
Shewanella denitrificans	1.578587	-0.528	2.139019	-0.24684	0.80503	0.906437
Candidatus Planktophila sulfonica	7.319722	-0.28687	1.176628	-0.24381	0.807379	0.908315
Capnocytophaga sputigena	143.0951	-0.1285	0.52612	-0.24423	0.807049	0.908315
Vibrio diabolicus	1.115032	-0.71155	2.919539	-0.24372	0.807447	0.908315
Propionibacterium virus Wizzo	7.384198	0.346461	1.424371	0.243238	0.807821	0.908455
Calothrix sp. NIES-2098	5.862124	0.46077	1.899682	0.242551	0.808353	0.908773
Lactococcus phage phi7	8.135266	-0.43539	1.797851	-0.24217	0.808647	0.908822
Cutibacterium acnes	286485.5	0.126551	0.526615	0.24031	0.81009	0.909882
Selenomonas sp. oral taxon 920	76.84713	-0.12458	0.517874	-0.24055	0.8099	0.909882
Candidatus Blochmannia floridanus	1.025915	0.6974	2.920836	0.238767	0.811286	0.910382
Propionibacterium virus Pirate	7.281062	0.417148	1.745266	0.239017	0.811093	0.910382
Spiroplasma culicicola	2.961405	0.531424	2.223058	0.239051	0.811066	0.910382
Acinetobacter sp. ADP1	31.78811	0.213935	0.900925	0.237462	0.812299	0.911237
Hungateiclostridium thermocellum	4.610452	0.383011	1.633051	0.234537	0.814568	0.913189
Blochmannia endosymbiont of Camponot	0.757556	-0.68516	2.924909	-0.23425	0.814792	0.913189
Chryseobacterium piperi	14.41359	0.223034	0.951528	0.234396	0.814678	0.913189
Plantactinospira sp. BB1	42.74861	-0.20343	0.872543	-0.23315	0.815643	0.913862
Pseudomonas sp. R3-18-08	1.843586	-0.63665	2.736179	-0.23268	0.81601	0.913991
Brucella sp. 141012304	0.361612	-0.67462	2.933345	-0.22998	0.818105	0.915775
Francisella sp. FDC440	2.048926	0.481815	2.094983	0.229985	0.818103	0.915775

Streptococcus lutetiensis	13.99677	-0.31881	1.398007	-0.22805	0.81961	0.916672
Serinicoccus sp. JLT9	185.2868	-0.09709	0.425862	-0.22798	0.819663	0.916672
Weissella soli	2.405082	0.469925	2.058162	0.228322	0.819396	0.916672
Algoriphagus machipongonensis	7.116857	0.299638	1.316309	0.227635	0.81993	0.916689
Streptomyces sp. ICC1	630.5358	-0.21891	0.966418	-0.22652	0.820797	0.917376
Aliivibrio wodanis	7.118535	-0.29805	1.330565	-0.224	0.822755	0.919
Candidatus Rhodoluna planktonica	11.95036	-0.1712	0.763626	-0.22419	0.822607	0.919
Blautia hansenii	77.81062	-0.19748	0.884234	-0.22333	0.823275	0.919298
Cronobacter turicensis	4.097025	0.418519	1.877028	0.222969	0.82356	0.919334
Flavobacteriaceae bacterium	6.614913	0.313188	1.412786	0.221681	0.824562	0.920171
Microbacterium paraoxydans	470.0421	0.175241	0.793002	0.220984	0.825105	0.920212
Butyrivibrio fibrisolvens	25.48771	0.220978	0.999657	0.221054	0.82505	0.920212
Thermococcus ruber	0.695412	-0.64254	2.92601	-0.2196	0.826185	0.921135
Pseudomonas rhizosphaerae	62.65575	0.135747	0.622545	0.218051	0.827389	0.922194
Propionibacterium sp. oral taxon 193	1704.706	-0.14451	0.66756	-0.21648	0.828615	0.922713
Macrococcus sp. IME1552	60.05624	-0.19245	0.887883	-0.21675	0.828399	0.922713
Pseudomonas sp. SWI44	18.18137	-0.33235	1.533563	-0.21671	0.828431	0.922713
Desulfosporosinus orientis	2.586871	-0.35073	1.623273	-0.21606	0.828937	0.922789
Lutibacter sp. LPB0138	13.95374	-0.26697	1.238237	-0.21561	0.829294	0.922903
Lysinibacillus sphaericus	32.76446	0.151916	0.707788	0.214635	0.830052	0.923285
Pseudomonas rhodesiae	84.80743	-0.12843	0.598699	-0.21452	0.830144	0.923285
Helicobacter canadensis	2.403863	0.477955	2.241883	0.213194	0.831176	0.924042
Acinetobacter sp. WCHAc010052	13.31724	-0.24432	1.147848	-0.21285	0.831446	0.924042
Bacillus megaterium	76.44473	-0.13075	0.614824	-0.21267	0.831587	0.924042
Lactobacillus sanfranciscensis	1.098231	0.424318	2.001148	0.212037	0.832078	0.924305
Nitratifactor salsuginis	10.01978	-0.24321	1.149198	-0.21163	0.832394	0.924374
Propionibacterium virus PHL116M00	8.321845	0.393641	1.881618	0.209203	0.834289	0.925631
Desulfotomaculum reducens	2.776209	-0.33946	1.62156	-0.20934	0.834181	0.925631
Propionibacterium virus PHL041M10	13.36337	0.393461	1.875295	0.209813	0.833814	0.925631
Pseudomonas sp. FGI182	6.383251	-0.36464	1.750719	-0.20828	0.83501	0.926148
Psychrobacter sp. G	52.66534	-0.23301	1.123484	-0.2074	0.835696	0.926627
Exiguobacterium antarcticum	4.504519	0.284238	1.373728	0.20691	0.83608	0.92677
Leuconostoc virus LN03	1.156229	-0.59948	2.918921	-0.20538	0.837277	0.927815
Capnocytophaga stomatis	10.07013	-0.24411	1.196946	-0.20395	0.838395	0.928356
Shewanella halifaxensis	6.742622	-0.29054	1.426919	-0.20361	0.838655	0.928356
Ruegeria sp. NKC1-1	1.275535	-0.48389	2.377224	-0.20355	0.838704	0.928356
Kangiella geojedonensis	1.857223	0.424896	2.088503	0.203445	0.838787	0.928356
Catenovulum sp. CCB-QB4	1.091619	0.441199	2.197239	0.200797	0.840857	0.929799
Propionibacterium virus Solid	23.17545	-0.28652	1.424342	-0.20116	0.840574	0.929799
Propionibacterium virus P1001	8.183354	0.352386	1.754854	0.200807	0.84085	0.929799
Moritella viscosa	6.866874	0.279679	1.398343	0.200007	0.841475	0.929897
Gramella sp. MAR_2010_102	0.790887	-0.58392	2.923946	-0.1997	0.841713	0.929897
bacterium 2013Arg42i	1.030124	0.584855	2.920648	0.200248	0.841286	0.929897
Lactobacillus allii	2.772486	-0.30651	1.539517	-0.1991	0.842188	0.929897
Streptomyces sp. ICC4	738.5596	0.194288	0.976288	0.199007	0.842257	0.929897
Halomonas sp. GT	2.441604	-0.44387	2.233616	-0.19872	0.842479	0.929897
Kocuria palustris	1291.18	-0.08944	0.452367	-0.19772	0.843264	0.930198
Arthrospira platensis	3.59212	-0.32193	1.626673	-0.1979	0.843119	0.930198
Bacillus cohnii	14.26784	0.165401	0.839034	0.197133	0.843724	0.930424
Chryseobacterium sp. StRB126	16.18551	-0.18035	0.917903	-0.19648	0.844236	0.930706

Anaerococcus prevotii	1698.477	-0.08824	0.45074	-0.19576	0.844795	0.930758
Flavobacterium gilvum	27.56672	-0.1646	0.840606	-0.19581	0.844757	0.930758
Pseudomonas tolaasii	42.05798	0.134682	0.691975	0.194634	0.845679	0.931451
Lachnoclostridium phytofermentans	23.26636	0.145948	0.752187	0.194031	0.846152	0.93146
Erysipelotrichaceae bacterium SG0102	10.20582	0.216717	1.121677	0.193208	0.846796	0.93146
Bacillus velezensis	38.91459	-0.21169	1.096898	-0.19299	0.846968	0.93146
Yersinia aleksiciae	2.194355	-0.40334	2.085631	-0.19339	0.846652	0.93146
Spirochaeta africana	12.75099	0.182361	0.941358	0.193721	0.846395	0.93146
Prevotella denticola	522.5609	-0.11007	0.571543	-0.19258	0.84729	0.931533
Chromobacterium violaceum	111.3118	-0.12202	0.634734	-0.19224	0.847553	0.93154
Methylomonas clara	17.1235	0.195155	1.020371	0.191259	0.848323	0.932104
Solitalea canadensis	16.56286	-0.16225	0.849925	-0.1909	0.848602	0.93213
Scardovia inopinata	16.18723	0.17636	0.927915	0.190061	0.849262	0.932412
Streptomyces sp. ADI95-16	44.35569	-0.14915	0.785336	-0.18992	0.849372	0.932412
Dickeya fangzhongdai	1.915444	-0.55015	2.912243	-0.18891	0.850164	0.932719
Neisseria subflava	498.1413	0.113518	0.600824	0.188937	0.850142	0.932719
Marinobacter sp. BSs20148	1.098797	0.547528	2.919374	0.18755	0.851229	0.933607
Pseudomonas sp. R4-34-07	0.329235	-0.54698	2.93447	-0.1864	0.852133	0.934255
Pseudomonas extremorientalis	42.44783	0.1386	0.744604	0.18614	0.852335	0.934255
Anabaena sp. WA102	1.673199	0.541195	2.912577	0.185813	0.852591	0.934255
Stenotrophomonas sp. G4	42.36415	0.150087	0.810742	0.185123	0.853133	0.934567
Brachybacterium saurashtrense	507.8028	-0.09147	0.49714	-0.184	0.854012	0.935009
Propionibacterium virus P1.1	14.51887	-0.25228	1.373899	-0.18363	0.854307	0.935009
Methylorubrum zatmanii	7.66466	0.327956	1.785991	0.183627	0.854306	0.935009
Capnocytophaga leadbetteri	203.3719	-0.11957	0.656893	-0.18202	0.855566	0.935542
Oenococcus oeni	2.644431	0.348119	1.906718	0.182575	0.855131	0.935542
Selenomonas sp. oral taxon 126	66.94933	-0.09213	0.505774	-0.18215	0.855466	0.935542
Pseudomonas frederiksbergensis	58.41803	-0.09767	0.540283	-0.18078	0.856543	0.936251
Halobacteriovorax marinus	6.523094	-0.25299	1.401284	-0.18054	0.856729	0.936251
Tetragenococcus osmophilus	2.648207	0.292951	1.6362	0.179044	0.857903	0.937253
Sulfurospirillum barnesii	3.276029	0.425083	2.382903	0.178389	0.858418	0.93735
Sedimentisphaera salicampi	1.033499	-0.52062	2.920343	-0.17827	0.858508	0.93735
Propionibacterium phage PHL085N00	6.76887	0.271876	1.544236	0.176058	0.860248	0.93773
Monoglobus pectinilyticus	19.7919	-0.22914	1.301705	-0.17603	0.860271	0.93773
Lactobacillus kefiranofaciens	5.093906	-0.25675	1.449431	-0.17714	0.859399	0.93773
Clostridium isatidis	14.74392	0.153443	0.872519	0.175862	0.860402	0.93773
Streptococcus phage SM1	3.478825	-0.3594	2.033304	-0.17676	0.8597	0.93773
Capnocytophaga gingivalis	160.5525	0.104403	0.588244	0.177482	0.85913	0.93773
Crinalium epipsammum	9.861701	-0.18085	1.036789	-0.17444	0.861522	0.938669
Hydromonas sp. F02	8.813671	0.221725	1.276631	0.173679	0.862117	0.939037
Pseudomonas moraviensis	107.8609	-0.10798	0.629723	-0.17147	0.863855	0.940367
Rahnella aquatilis	134.2072	-0.106	0.617501	-0.17166	0.863703	0.940367
Lactobacillus hokkaidonensis	6.979329	0.189961	1.113812	0.17055	0.864577	0.940645
Colwellia psychrerythraea	1.522513	-0.43686	2.562414	-0.17049	0.864628	0.940645
Leptolyngbya boryana	10.43849	-0.16478	0.970581	-0.16977	0.865189	0.940974
Desulfobacterium autotrophicum	6.812914	-0.19305	1.139786	-0.16937	0.865505	0.941036
Pseudothromotoga thermarum	0.390751	0.493763	2.933976	0.168291	0.866354	0.941116
Actinobacillus suis	3.975047	0.262264	1.556415	0.168505	0.866186	0.941116
Helicobacter sp. MIT 01-6242	0.57728	-0.49297	2.92834	-0.16834	0.866313	0.941116
Nostoc linckia	16.8478	0.172095	1.029755	0.167122	0.867274	0.941323

Propionibacterium virus Lauchelly	16.06299	0.23661	1.411593	0.167619	0.866883	0.941323
Bacillus pseudofirmus	3.883875	-0.21615	1.2938	-0.16706	0.867321	0.941323
Acinetobacter bereziniae	39.15459	0.129677	0.777976	0.166685	0.867618	0.941364
Thermoanaerobacterium xylanolyticum	4.003095	-0.23373	1.419669	-0.16463	0.869232	0.941972
Candidatus Nanopelagicus limnes	1.029103	-0.4803	2.920295	-0.16447	0.869361	0.941972
Photorhabdus asymbiotica	6.28622	-0.19985	1.214499	-0.16455	0.869296	0.941972
Mycobacterium sp. JLS	86.93741	-0.1179	0.720368	-0.16367	0.869991	0.941972
Glaciecola sp. 4H-3-7+YE-5	4.140759	-0.25676	1.567909	-0.16376	0.869922	0.941972
Clostridium aceticum	7.235444	-0.18729	1.132289	-0.16541	0.868625	0.941972
Sodalis endosymbiont of Henestaris halor	0.565501	-0.48087	2.928624	-0.1642	0.869578	0.941972
Shewanella pealeana	2.788699	-0.3109	1.904083	-0.16328	0.870297	0.942024
Hippea maritima	0.474415	0.476271	2.931254	0.16248	0.870928	0.942145
Gillisia sp. Hel1_33_143	5.46681	-0.19788	1.217633	-0.16251	0.870902	0.942145
Pseudomonas orientalis	125.5154	0.091445	0.567789	0.161054	0.872051	0.943021
Acinetobacter lactucae	11.05918	-0.1748	1.087111	-0.16079	0.872256	0.943021
Pseudomonas synxantha	210.9767	-0.09362	0.584276	-0.16023	0.872697	0.943218
Formosa sp. Hel1_33_131	5.259805	-0.26308	1.660157	-0.15847	0.874087	0.944159
Paraliobacillus sp. X-1125	6.549651	0.210624	1.328879	0.158497	0.874065	0.944159
Pseudoalteromonas aliena	2.033899	0.359065	2.27116	0.158097	0.87438	0.944195
Dialister sp. Marseille-P5638	31.46664	-0.17299	1.097557	-0.15761	0.874763	0.944248
Stenotrophomonas sp. LM091	331.0304	-0.08412	0.535006	-0.15723	0.875065	0.944248
Moraxella osloensis	25029.71	0.090289	0.574916	0.157048	0.875207	0.944248
Phaeobacter inhibens	36.12016	0.098556	0.634968	0.155214	0.876653	0.944433
Lactobacillus lindneri	2.962506	0.273535	1.756924	0.15569	0.876278	0.944433
Polaribacter sp. KT 15	2.387919	0.376222	2.415753	0.155737	0.87624	0.944433
Enterobacter ludwigii	1.112387	-0.45302	2.919253	-0.15518	0.876677	0.944433
Sulfitobacter sp. SK025	22.88569	-0.11973	0.771336	-0.15523	0.876642	0.944433
Dickeya zeae	43.47832	0.07301	0.473339	0.154245	0.877416	0.94467
Methanocorpusculum labreanum	0.850884	-0.45162	2.922635	-0.15453	0.877195	0.94467
Candidatus Izimaplasma sp. HR1	5.615662	0.20087	1.309604	0.153382	0.878097	0.945123
Pseudomonas cerasi	1.618069	-0.38593	2.527585	-0.15269	0.878644	0.945152
Solibacillus silvestris	8.829065	0.149248	0.975959	0.152924	0.878458	0.945152
Acetobacterium woodii	5.68322	-0.21519	1.432355	-0.15024	0.880579	0.946954
Leuconostoc suionicum	3.84558	0.278174	1.883285	0.147707	0.882574	0.947796
Marinomonas sp. MWYL1	4.586136	-0.20554	1.392593	-0.14759	0.882664	0.947796
Propionibacterium virus MrAK	24.58941	0.298158	2.010763	0.148281	0.882121	0.947796
Flavobacterium faecale	12.02903	0.193894	1.306337	0.148425	0.882007	0.947796
Endomicrobium proavitum	1.218442	-0.43033	2.90551	-0.14811	0.882257	0.947796
Clostridium sp. BNL1100	8.888912	0.154278	1.05079	0.146821	0.883273	0.94789
Kribbella flavida	141.3567	-0.06679	0.454052	-0.1471	0.88305	0.94789
Lactobacillus sp. BHWM-4	0.913125	0.358248	2.492439	0.143734	0.885711	0.948827
Rhizobium sp. S41	136.8303	0.172701	1.200504	0.143857	0.885613	0.948827
Candidatus Azobacteroides pseudotricho	8.041905	0.180408	1.249229	0.144415	0.885172	0.948827
Bacillus muralis	3.961639	-0.19305	1.338516	-0.14423	0.885321	0.948827
Pantoea vagans	237.129	0.097718	0.676872	0.144366	0.885211	0.948827
Nostoc carneum	0.566464	0.423409	2.928512	0.144582	0.885041	0.948827
Xenorhabdus doucetiae	9.766922	0.142286	1.000605	0.1422	0.886922	0.949844
Chryseobacterium arthrosphaerae	23.37029	-0.12787	0.903144	-0.14158	0.887413	0.950012
Enterococcus gallinarum	1.049875	-0.41271	2.91993	-0.14134	0.887601	0.950012
Pseudomonas protegens	203.0288	-0.07656	0.54685	-0.14001	0.888655	0.950861

Muricauda lutaonensis	4.249086	-0.21609	1.556949	-0.13879	0.889615	0.951328
Lactobacillus buchneri	3.884609	-0.19608	1.411034	-0.13896	0.889481	0.951328
Marinobacter sp. CP1	12.04787	-0.13934	1.011703	-0.13773	0.890452	0.951665
Acinetobacter lwoffii	582.7408	-0.08477	0.615461	-0.13773	0.890453	0.951665
Dictyoglomus thermophilum	1.054165	-0.30258	2.209617	-0.13694	0.891079	0.952055
Fusobacterium hwasookii	34.01487	0.099121	0.732503	0.135319	0.89236	0.952166
Zobellia galactanivorans	5.505683	0.163698	1.200922	0.13631	0.891576	0.952166
Propionibacterium virus ATCC29399BT	3.113176	0.381897	2.814264	0.135701	0.892058	0.952166
Human polyomavirus 5	86.96373	-0.27158	2.001111	-0.13572	0.892046	0.952166
Human papillomavirus KC5	3.313383	0.349036	2.582542	0.135152	0.892492	0.952166
Mesoplasma syrphidae	0.362718	0.395041	2.934765	0.134607	0.892922	0.952346
Rhodococcus sp. S2-17	162.7021	-0.06012	0.45054	-0.13344	0.893843	0.952699
Propionibacterium virus PHL060L00	10.87973	-0.23543	1.767593	-0.13319	0.894039	0.952699
Staphylococcus virus 37	0.624199	0.39084	2.927116	0.133524	0.893779	0.952699
Staphylococcus piscifermentans	16.34997	0.105776	0.802688	0.131777	0.895161	0.953057
Acinetobacter sp. LoGeW2-3	27.16975	0.108926	0.82554	0.131945	0.895028	0.953057
Fictibacillus phosphorivorans	5.278481	0.169763	1.282482	0.132371	0.894691	0.953057
Brevundimonas diminuta	361.8637	0.062673	0.481407	0.130188	0.896418	0.953558
Chryseobacterium indologenes	142.7746	0.080557	0.618017	0.130348	0.896291	0.953558
Rhodoluna lacicola	10.15447	0.096657	0.739182	0.130763	0.895963	0.953558
Lactobacillus sp. CBA3606	0.592266	0.378713	2.927806	0.12935	0.89708	0.953705
Faecalibacterium prausnitzii	954.8395	0.074428	0.574234	0.129613	0.896873	0.953705
Propionibacterium phage PHL030N00	11.59803	-0.30848	2.405036	-0.12826	0.89794	0.954061
Leuconostoc mesenteroides	166.4589	-0.10685	0.831386	-0.12852	0.897739	0.954061
Aeromonas sp. CU5	7.595709	-0.16501	1.30609	-0.12634	0.899463	0.955303
Providencia heimbachae	4.350988	-0.22139	1.757308	-0.12598	0.899747	0.955303
Negativicoccus massiliensis	268.4872	-0.07398	0.589926	-0.12541	0.900202	0.955303
Fusobacterium necrophorum	37.80884	-0.08892	0.712537	-0.1248	0.900684	0.955303
Rhodococcus sp. 2G	56.09804	0.156476	1.248104	0.125371	0.90023	0.955303
Megasphaera stantonii	10.20235	0.117828	0.943083	0.124939	0.900572	0.955303
Simkania negevensis	0.355545	0.364616	2.934985	0.124231	0.901132	0.9555
Campylobacter ureolyticus	94.99381	-0.09859	0.800336	-0.12318	0.901964	0.955966
Murdochiella vaginalis	147.0778	0.08632	0.701721	0.123012	0.902098	0.955966
Tetragenococcus halophilus	29.40555	-0.10863	0.889739	-0.12209	0.902825	0.956223
Moritella yayanosii	7.465574	-0.13531	1.108724	-0.12204	0.902865	0.956223
Candidatus Planktophila vernalis	0.554038	0.35281	2.928737	0.120465	0.904115	0.957267
Psychrobacter sp. P2G3	17.00337	-0.18251	1.526065	-0.11959	0.904804	0.957718
Acinetobacter pittii	290.2627	0.061274	0.515608	0.118838	0.905404	0.958074
Flavobacterium johnsoniae	50.16558	0.07341	0.633867	0.115814	0.9078	0.960331
Spiroplasma monobiae	0.536918	-0.33663	2.929212	-0.11492	0.908506	0.960798
Serratia fonticola	42.6784	-0.06634	0.580421	-0.11429	0.909008	0.960953
Lactobacillus fermentum	57.3204	0.091229	0.799751	0.114071	0.909181	0.960953
Colwellia sp. PAMC 20917	14.29563	-0.12685	1.121552	-0.1131	0.909951	0.961488
Ignavibacterium album	8.46807	-0.11908	1.057211	-0.11264	0.910317	0.961595
Mycoplasma penetrans	4.873769	0.165163	1.480373	0.111568	0.911166	0.961933
Lactobacillus crispatus	49.08365	-0.09278	0.830786	-0.11167	0.911082	0.961933
Belliella baltica	11.10341	-0.11987	1.085481	-0.11043	0.912068	0.962327
Streptobacillus moniliformis	14.17922	-0.09703	0.878633	-0.11043	0.912066	0.962327
Carboxydocella thermautotrophica	4.099295	-0.15229	1.420695	-0.10719	0.914637	0.962848
Sedimentisphaera cyanobacteriorum	0.807125	0.317686	2.923449	0.108668	0.913466	0.962848

Campylobacter cuniculorum	0.885101	-0.26608	2.504438	-0.10624	0.91539	0.962848
Roseovarius sp. TM1035	6.794911	-0.1869	1.755975	-0.10644	0.915234	0.962848
Pseudomonas sp. Os17	2.265337	-0.30876	2.909028	-0.10614	0.915473	0.962848
Seonamhaeicola sp. S2-3	12.10836	0.112321	1.054727	0.106493	0.915191	0.962848
Gammapapillomavirus 24	2.034387	0.316061	2.909216	0.108641	0.913487	0.962848
Propionibacterium virus PHL092M00	42.49899	0.140777	1.326084	0.10616	0.915455	0.962848
Serratia sp. P2ACOL2	11.99349	0.144768	1.360613	0.106399	0.915266	0.962848
Lawsonella clevelandensis	3777.258	0.055252	0.51088	0.108151	0.913876	0.962848
Bacillus pumilus	19.0946	-0.08005	0.732915	-0.10922	0.913026	0.962848
Enterococcus faecalis	193.4141	-0.07383	0.699005	-0.10562	0.915885	0.962975
Bifidobacterium pseudocatenulatum	61.61994	0.09256	0.878862	0.105318	0.916124	0.962975
Alphapapillomavirus 2	5.364853	0.260109	2.492115	0.104373	0.916873	0.963485
Acetobacter persici	6.764757	-0.1196	1.152773	-0.10375	0.917365	0.963723
Lactococcus phage jm3	5.389523	0.183809	1.781654	0.103168	0.91783	0.963933
Providencia rettgeri	15.51662	0.090477	0.890147	0.101643	0.91904	0.964926
Vibrio mediterranei	4.148335	0.148665	1.476134	0.100713	0.919779	0.965423
Mucilagibacter paludis	28.24242	-0.06282	0.626098	-0.10033	0.92008	0.965449
Propionibacterium virus PA6	34.31993	0.134063	1.340459	0.100012	0.920334	0.965449
Bacillus sp. X1(2014)	2.625535	0.170783	1.746559	0.097783	0.922105	0.966577
Leptotrichia buccalis	128.6797	0.055176	0.565019	0.097654	0.922207	0.966577
Sulfurimonas denitrificans	0.796231	-0.25028	2.559646	-0.09778	0.922106	0.966577
[Eubacterium] sulci	53.02975	0.079496	0.833458	0.09538	0.924013	0.967912
Streptococcus sobrinus	25.65919	-0.08747	0.914378	-0.09566	0.923794	0.967912
Microbacterium sp. PM5	110.7517	-0.04051	0.429303	-0.09437	0.924816	0.968474
Bacillus flexus	13.08825	0.098125	1.051542	0.093315	0.925653	0.968799
Gammapapillomavirus 8	2.030112	0.253246	2.714064	0.093309	0.925658	0.968799
Erwinia billingiae	76.42011	-0.05568	0.603736	-0.09222	0.926523	0.969217
Leptotrichia sp. oral taxon 498	40.70789	0.064443	0.699439	0.092135	0.926591	0.969217
Kangiella profunda	2.444275	0.173955	1.915843	0.090798	0.927653	0.96977
Elizabethkingia meningoseptica	17.20995	0.068608	0.753056	0.091106	0.927409	0.96977
Candidatus Hamiltonella defensa	6.411892	0.150418	1.672396	0.089942	0.928334	0.970203
Enterobacter sp. E20	0.989605	-0.25283	2.920536	-0.08657	0.931014	0.971843
Paenibacillus sp. Y412MC10	5.076563	0.115994	1.344283	0.086287	0.931238	0.971843
Pectobacterium parmentieri	17.62617	-0.06956	0.800911	-0.08686	0.930786	0.971843
Legionella lansingensis	6.428645	0.129116	1.493558	0.086449	0.93111	0.971843
Pseudomonas sp. JY-Q	3.28334	-0.17494	2.026654	-0.08632	0.931213	0.971843
Dickeya solani	2.994529	-0.17307	2.030347	-0.08524	0.932071	0.972103
Erwinia sp. Ejp617	1.220651	0.248152	2.917749	0.085049	0.932222	0.972103
Chroococciopsis thermalis	7.718633	0.102909	1.211184	0.084965	0.932289	0.972103
Bacillus sp. Y1	10.63787	-0.08766	1.042881	-0.08406	0.93301	0.972577
Tobacco vein clearing virus	3.461801	0.198	2.37805	0.083261	0.933644	0.972679
Desulfovibrio hydrothermalis	1.638169	0.162679	1.953382	0.083281	0.933628	0.972679
Paenibacillus larvae	2.270758	-0.14374	1.786942	-0.08044	0.935889	0.973406
Gloeomargarita lithophora	5.085032	-0.10643	1.371919	-0.07758	0.938163	0.973406
Macrococcus caseolyticus	41.5637	0.073921	0.941631	0.078503	0.937428	0.973406
Lactococcus virus CB14	6.154074	-0.13815	1.769972	-0.07805	0.937785	0.973406
Alkaliphilus metalliredigens	14.20202	0.069993	0.905032	0.077338	0.938355	0.973406
Desulfofarcimen acetoxidans	4.473891	0.105709	1.356389	0.077934	0.93788	0.973406
Flavobacterium crocinum	19.84171	-0.05264	0.665923	-0.07905	0.936993	0.973406
Thalassospira marina	18.09541	-0.04898	0.605513	-0.08088	0.935535	0.973406

<i>Gordonia rubripertincta</i>	504.3071	-0.0415	0.515492	-0.0805	0.935843	0.973406
<i>Enterobacter cloacae</i> complex sp.	18.51412	-0.06929	0.88857	-0.07798	0.937842	0.973406
<i>Deinococcus radiodurans</i>	102.3164	0.051923	0.639469	0.081196	0.935286	0.973406
<i>Enterobacter</i> sp. Crenshaw	0.705455	-0.22741	2.924975	-0.07775	0.93803	0.973406
<i>Thermosipho africanus</i>	1.170518	-0.2341	2.918652	-0.08021	0.936071	0.973406
<i>Acinetobacter calcoaceticus</i>	38.83435	-0.06737	0.837689	-0.08042	0.9359	0.973406
<i>Streptococcus ferus</i>	11.32435	-0.10171	1.273638	-0.07986	0.93635	0.973406
<i>Gemella morbillorum</i>	258.0886	0.040471	0.536656	0.075413	0.939886	0.97345
<i>Lactobacillus curvatus</i>	152.3367	0.054344	0.720266	0.07545	0.939857	0.97345
<i>Pseudomonas umsongensis</i>	43.90167	0.050835	0.665041	0.076439	0.93907	0.97345
<i>Thermococcus eurythermalis</i>	0.250255	-0.22108	2.937236	-0.07527	0.940003	0.97345
<i>Serratia</i> sp. SSNIH1	1.341186	0.219581	2.916245	0.075296	0.939979	0.97345
<i>Desulfocapsa sulfexigens</i>	0.994507	-0.18858	2.464985	-0.0765	0.939018	0.97345
<i>Bacillus</i> sp. FJAT-18017	8.397954	-0.07846	1.049975	-0.07473	0.94043	0.973616
<i>Propionibacterium</i> virus PHL141N00	12.09156	-0.12026	1.672048	-0.07192	0.942664	0.974431
<i>Corynebacterium flavescens</i>	2592.475	0.019349	0.269495	0.071796	0.942764	0.974431
<i>Staphylococcus</i> phage phiRS7	2.706225	-0.1594	2.214126	-0.07199	0.942607	0.974431
Candidatus <i>Baumannia cicadellinicola</i>	3.020775	0.128808	1.770365	0.072758	0.941999	0.974431
<i>Carnobacterium</i> sp. 17-4	17.8398	-0.06386	0.87297	-0.07315	0.941685	0.974431
<i>Sphingobacteriaceae</i> bacterium GW460-1	25.04565	-0.04876	0.679902	-0.07172	0.942825	0.974431
Candidatus <i>Methanomethylophilus alvus</i>	0.465657	-0.20838	2.931118	-0.07109	0.943325	0.97454
<i>Erysipelothrix rhusiopathiae</i>	27.59913	-0.05303	0.747818	-0.07091	0.943466	0.97454
<i>Brevibacterium aurantiacum</i>	552.8338	-0.03505	0.49814	-0.07036	0.943904	0.974715
<i>Thermus scotoductus</i>	36.53945	-0.04404	0.645052	-0.06827	0.945571	0.975736
<i>Pseudomonas mucidolens</i>	39.85925	-0.04171	0.607194	-0.0687	0.945231	0.975736
<i>Chlamydia</i> sp. 2742-308	0.440338	0.199721	2.932256	0.068112	0.945697	0.975736
<i>Fervidobacterium pennivorans</i>	1.127874	-0.17675	2.669442	-0.06621	0.947208	0.977018
<i>Marinobacter salinus</i>	10.81766	0.07262	1.106928	0.065605	0.947693	0.977241
<i>Propionibacterium</i> virus P104A	11.49125	-0.12513	1.982562	-0.06312	0.949673	0.977897
<i>Streptococcus</i> sp. I-P16	68.90645	-0.04853	0.768159	-0.06318	0.949627	0.977897
<i>Salinispora tropica</i>	42.54851	0.031034	0.488229	0.063565	0.949317	0.977897
<i>Lysinibacillus</i> sp. 2017	4.303936	0.075207	1.184487	0.063493	0.949374	0.977897
<i>Leptotrichia</i> sp. oral taxon 847	20.67392	-0.05924	0.920652	-0.06435	0.948693	0.977897
<i>Paenibacillus</i> sp. BIHB4019	8.082799	-0.07666	1.255353	-0.06106	0.951308	0.979041
<i>Runella</i> sp. SP2	12.09928	-0.05827	0.954594	-0.06105	0.951322	0.979041
<i>Bacillus jeotgali</i>	7.049156	0.078104	1.301255	0.060022	0.952138	0.979122
<i>Christensenella massiliensis</i>	7.543923	-0.08293	1.38655	-0.05981	0.952305	0.979122
<i>Gluconobacter albidus</i>	6.184766	-0.06835	1.166677	-0.05858	0.953285	0.979122
<i>Bacillus simplex</i>	31.68897	-0.04582	0.77431	-0.05918	0.95281	0.979122
<i>Yersinia pseudotuberculosis</i>	0.966284	-0.17538	2.920832	-0.06004	0.95212	0.979122
<i>Coralimargarita akajimensis</i>	1.084423	0.130845	2.202932	0.059396	0.952637	0.979122
<i>Staphylococcus auricularis</i>	248.0416	-0.03639	0.618995	-0.05878	0.953125	0.979122
<i>Clostridium sporogenes</i>	111.0922	0.05218	0.947349	0.05508	0.956075	0.979499
<i>Acinetobacter defluvii</i>	30.48488	-0.04819	0.874583	-0.0551	0.956055	0.979499
uncultured crAssphage	0.939002	0.161708	2.921305	0.055355	0.955856	0.979499
<i>Salegentibacter salegens</i>	5.685686	0.071559	1.293715	0.055313	0.955889	0.979499
<i>Chryseolinea</i> sp. KIS68-18	61.56131	-0.03375	0.597517	-0.05649	0.95495	0.979499
<i>Calothrix</i> sp. NIES-3974	6.176866	-0.08028	1.450726	-0.05534	0.955867	0.979499
<i>Thermus brockianus</i>	2.57482	-0.09735	1.748187	-0.05568	0.955593	0.979499
<i>Colwellia</i> sp. MT41	2.96326	0.093248	1.679615	0.055517	0.955726	0.979499

Megamonas hypermegale	10.00933	0.060391	1.059575	0.056996	0.954548	0.979499
Propionibacterium virus Procrass1	5.121363	-0.07476	1.410153	-0.05302	0.957718	0.979837
Listeria innocua	6.841867	-0.07774	1.471689	-0.05282	0.957872	0.979837
Leuconostoc kimchii	4.463516	-0.14263	2.708517	-0.05266	0.958004	0.979837
Thermosynechococcus sp. NK55a	1.559248	0.110042	2.104081	0.052299	0.95829	0.979837
Sphingobacterium sp. G1-14	84.23243	0.0478	0.909961	0.05253	0.958106	0.979837
Chania multitudinisentens	7.853463	0.06277	1.165091	0.053875	0.957035	0.979837
Enterococcus hirae	7.107411	-0.06048	1.126886	-0.05367	0.957195	0.979837
Photorhabdus thracensis	8.947296	0.057399	1.116158	0.051426	0.958986	0.980234
Pseudomonas mediterranea	25.74423	-0.03833	0.749578	-0.05114	0.959217	0.980234
Treponema primitia	7.159209	0.056372	1.11708	0.050464	0.959753	0.980506
Propionibacterium virus ATCC29399BC	22.92	-0.09974	2.006895	-0.0497	0.960363	0.980711
Propionibacterium virus PHL114L00	18.72913	-0.08419	1.699557	-0.04954	0.960493	0.980711
Erysipelothrix larvae	9.853054	0.058719	1.20285	0.048816	0.961066	0.98102
Bacillus xiamenensis	1.247034	0.104993	2.175528	0.048261	0.961508	0.981197
Elizabethkingia ursingii	3.070417	0.094264	2.043327	0.046133	0.963204	0.981649
Propionibacterium virus PHL071N05	14.32192	0.082171	1.766276	0.046522	0.962894	0.981649
Vibrio parahaemolyticus	43.19387	-0.03106	0.666947	-0.04657	0.962855	0.981649
Glutamicibacter nicotianae	153.7385	0.018298	0.387889	0.047173	0.962376	0.981649
Acinetobacter larvae	12.89374	0.058453	1.270395	0.046012	0.963301	0.981649
Chamaesiphon minutus	1.453427	0.116569	2.569491	0.045367	0.963815	0.981793
Salinimonas sp. HMF8227	4.406216	-0.06559	1.45237	-0.04516	0.963982	0.981793
Streptococcus sp. I-G2	67.79932	0.030449	0.685054	0.044448	0.964547	0.982094
Acinetobacter nosocomialis	48.41303	0.032127	0.731939	0.043893	0.96499	0.98227
Lysinimonas sp. 2DFWR-13	164.6009	0.022532	0.518102	0.043489	0.965311	0.982323
Entomoplasma luminosum	2.186079	0.096556	2.267578	0.042581	0.966035	0.98251
Candidatus Pelagibacter sp. HIMB1321	3.067152	-0.08152	1.904981	-0.0428	0.965865	0.98251
Planococcus versutus	7.415671	0.060306	1.483905	0.04064	0.967583	0.983345
Halobacteriovorax sp. BALOs_7	3.620787	0.070975	1.753446	0.040477	0.967713	0.983345
Enterobacter sp. R4-368	4.696087	-0.05537	1.367871	-0.04048	0.967714	0.983345
Psychrobacter arcticus	24.41654	0.035225	0.87636	0.040195	0.967938	0.983345
Thermodesulfobacterium geofontis	0.858447	-0.10994	2.794306	-0.03934	0.968617	0.98376
Formosa sp. Hel1_31_208	3.777799	0.064003	1.667578	0.038381	0.969384	0.98399
Propionibacterium phage Enoki	13.62034	0.053509	1.386832	0.038583	0.969223	0.98399
Bifidobacterium kashiwanohense	51.00371	0.027156	0.717967	0.037823	0.969828	0.984122
Bacillus foraminis	5.905202	-0.04888	1.302195	-0.03754	0.970055	0.984122
Photorhabdus laumondii	5.018604	-0.04941	1.373142	-0.03598	0.971297	0.984861
Candidatus Nanopelagicus hibericus	0.989982	0.104985	2.920643	0.035946	0.971325	0.984861
Thermoanaerobacteriales bacterium SK-G	5.34155	-0.03941	1.111977	-0.03544	0.971728	0.984995
Vibrio tasmaniensis	3.067529	-0.06682	2.026305	-0.03297	0.973695	0.986439
Thermovibrio ammonificans	0.855777	-0.09283	2.7981	-0.03318	0.973535	0.986439
Chryseobacterium joostei	14.9251	0.033981	1.073414	0.031657	0.974746	0.986911
Snodgrassella alvi	31.13192	0.02532	0.815612	0.031044	0.975235	0.986911
Winogradskyella sp. J14-2	2.942702	-0.05532	1.782663	-0.03103	0.975246	0.986911
Elizabethkingia bruuniana	3.216665	-0.06405	2.018172	-0.03174	0.974683	0.986911
Salinibacterium sp. CGMCC 1.16371	80.51657	0.014592	0.477036	0.03059	0.975597	0.986991
Salimicrobium jeotgali	0.629395	-0.08808	2.926641	-0.03009	0.975992	0.987116
Citrobacter freundii	68.05547	-0.02628	0.909675	-0.02889	0.976952	0.987643
Citrobacter braakii	2.204031	-0.07639	2.655942	-0.02876	0.977055	0.987643
Sediminispirochaeta smaragdinae	0.907097	-0.06249	2.2645	-0.0276	0.977985	0.98821

Desulfitobacterium dichloroeliminans	5.521767	-0.04814	1.765828	-0.02726	0.978251	0.98821
Pasteurellaceae bacterium NI1060	5.979164	-0.03312	1.226123	-0.02701	0.978449	0.98821
Pseudomonas sp. R11-23-07	2.401552	0.077449	2.901161	0.026696	0.978702	0.98821
Dokdonia sp. 4H-3-7-5	0.681048	-0.07626	2.925448	-0.02607	0.979202	0.98844
Legionella clemsonensis	2.709335	0.038754	1.549587	0.025009	0.980048	0.989019
Streptococcus mutans	369.9229	0.017072	0.70901	0.024078	0.98079	0.98922
Francisella sp. FSC1006	2.257032	0.046694	1.914827	0.024386	0.980545	0.98922
Thermincola potens	4.358153	0.030761	1.366668	0.022508	0.982042	0.990208
Actinotignum schaalii	168.0202	-0.01098	0.500896	-0.02192	0.982515	0.99041
Chryseobacterium glaciei	19.53588	0.018052	0.900374	0.02005	0.984004	0.991319
Bifidobacterium adolescentis	294.6065	-0.01205	0.608302	-0.0198	0.984201	0.991319
Xanthomonas fragariae	25.85526	0.011126	0.563763	0.019735	0.984255	0.991319
Chlorobium phaeobacteroides	1.330448	0.045796	2.358223	0.01942	0.984506	0.991319
Lactobacillus farciminis	3.659717	0.025498	1.430279	0.017827	0.985777	0.992049
Enterococcus wangshanyuanii	13.84625	0.015443	0.858446	0.017989	0.985648	0.992049
Mycoplasma edwardii	2.775407	0.038025	2.407788	0.015792	0.9874	0.993407
Paenibacillus sp. FSL R5-0912	1.627957	-0.03215	2.301946	-0.01397	0.988857	0.994598
Mycobacterium ulcerans	58.7201	-0.01865	1.368876	-0.01362	0.989131	0.994599
Chryseobacterium haifense	46.15918	0.010577	0.810652	0.013048	0.98959	0.994603
Shewanella livingstonensis	4.029667	-0.01967	1.562397	-0.01259	0.989955	0.994603
Helicobacter bilis	4.971233	-0.02799	2.172324	-0.01289	0.989718	0.994603
Sodalis praecaptivus	16.16688	0.012001	1.040765	0.011531	0.9908	0.994902
Propionibacterium virus PHL111M01	16.61314	0.019066	1.615726	0.0118	0.990585	0.994902
Marinobacter psychrophilus	0.578432	0.031684	2.927903	0.010821	0.991366	0.994929
Chryseobacterium bernardetii	33.89231	-0.00754	0.697766	-0.01081	0.991373	0.994929
Gemella sp. ND 6198	5.105433	-0.02361	2.292164	-0.0103	0.991782	0.995065
Bacillus wiedmannii	2.820446	-0.01911	2.232459	-0.00856	0.993172	0.995909
Colwellia sp. PAMC 21821	2.701474	-0.01581	1.777708	-0.0089	0.992902	0.995909
Herbinix luporum	11.96346	0.007722	1.136606	0.006794	0.994579	0.996497
Lactobacillus johnsonii	26.82487	-0.00492	0.711787	-0.00691	0.994484	0.996497
Candidatus Pelagibacter sp. IMCC9063	0.963454	0.017549	2.485605	0.00706	0.994367	0.996497
Elizabethkingia anophelis	75.84501	-0.00337	0.575968	-0.00585	0.995331	0.996703
Pseudomonas sp. TKP	2.185557	0.015676	2.679826	0.00585	0.995333	0.996703
Anaerolineaceae bacterium oral taxon 43	6.583372	-0.00576	1.372672	-0.00419	0.996654	0.997476
Exiguobacterium sp. MH3	24.64131	0.005819	1.3251	0.004391	0.996496	0.997476
Propionibacterium virus PHL009M11	16.968	-0.00942	2.481391	-0.0038	0.996971	0.997514
Clostridium tyrobutyricum	19.40266	0.00286	0.826942	0.003459	0.99724	0.997514
Aneurinibacillus sp. XH2	2.40513	-0.00324	1.897905	-0.00171	0.998639	0.998639

	baseMean	log2FoldCh	lfcSE	stat	pvalue	padj
Arcobacter	217.1963	1.918119	0.390478	4.912236	9.00E-07	0.000854
Methanosarcina	98.02084	1.755386	0.374929	4.68192	2.84E-06	0.000854
Mycoplasma	254.5904	1.803441	0.389037	4.63565	3.56E-06	0.000854
Borrelia	80.47319	2.539091	0.533238	4.761648	1.92E-06	0.000854
Spiroplasma	163.5803	1.973828	0.455042	4.337681	1.44E-05	0.002765
Carnobacterium	733.7274	2.671146	0.63576	4.201503	2.65E-05	0.004242
Ethanoligenens	163.5575	-3.54083	0.860487	-4.11491	3.87E-05	0.005312
Clostridium	1611.695	1.255679	0.310157	4.04853	5.15E-05	0.006185
Francisella	102.4188	1.631129	0.409995	3.978414	6.94E-05	0.0074
Helicobacter	100.1122	1.387951	0.354711	3.912911	9.12E-05	0.008754
Lacinutrix	49.17966	1.49295	0.385011	3.877684	0.000105	0.009203
Aquimarina	51.55159	1.812231	0.474958	3.815559	0.000136	0.01087
Polaribacter	145.6738	1.330483	0.358039	3.716032	0.000202	0.014945
Candidatus Meth	10.2439	-3.35361	0.913911	-3.66951	0.000243	0.016664
Bacillus	4037.308	1.514815	0.429665	3.525576	0.000423	0.027044
Phietavirus	3547.438	2.889099	0.827362	3.491942	0.00048	0.027079
Ehrlichia	25.47551	3.021406	0.864775	3.493865	0.000476	0.027079
Bacterioplanes	5.789919	-2.72224	0.791907	-3.43758	0.000587	0.030593
Brachyspira	95.83986	1.682075	0.492526	3.415198	0.000637	0.030593
Rickettsia	59.45872	1.709544	0.50009	3.418475	0.00063	0.030593
Libanicoccus	41.11011	-2.09786	0.63149	-3.32208	0.000893	0.040846
Woeseia	15.14639	-2.23886	0.678729	-3.29861	0.000972	0.042399
Geoalkalibacter	27.14344	-1.75151	0.54039	-3.2412	0.00119	0.049682
Prochlorococcus	78.77904	1.29278	0.401525	3.219679	0.001283	0.051334
Winogradskyella	43.24964	1.427262	0.447153	3.191887	0.001413	0.054277
Candidatus Pelagi	36.99456	1.763674	0.557002	3.166368	0.001544	0.056993
Methanococcus	29.3845	2.133272	0.705935	3.02191	0.002512	0.08931
Candidatus Nano	20.20345	-2.90617	0.966908	-3.00563	0.00265	0.090868
Geminocystis	46.44007	1.315398	0.441439	2.979799	0.002884	0.092893
Thermoanaeroba	53.95976	1.424844	0.478483	2.977838	0.002903	0.092893
Borrelliella	33.42886	2.500426	0.856497	2.919364	0.003507	0.102035
Thioflavococcus	39.10327	-1.23174	0.420697	-2.92786	0.003413	0.102035
Phyllobacterium	24.61895	-1.41056	0.48252	-2.92333	0.003463	0.102035
Rhodomicrobium	22.80382	-1.54054	0.547925	-2.81159	0.00493	0.139194
Azorhizobium	84.55738	-0.88202	0.321928	-2.7398	0.006148	0.143946
Sulfolobus	12.52057	3.172668	1.157597	2.740736	0.00613	0.143946
Pelodictyon	11.17924	-1.8083	0.65483	-2.76147	0.005754	0.143946
Olleya	20.03512	1.945045	0.697031	2.79047	0.005263	0.143946
Phreatobacter	101.1055	-0.78457	0.284953	-2.75335	0.005899	0.143946
Hyphomicrobium	109.5445	-0.97642	0.351891	-2.77478	0.005524	0.143946

Results with p value < 0.05 from the table on the left, organised by the condition and differ

Genera more abundant in control condition

	baseMean	log2FoldCh	lfcSE	stat	pvalue	padj
Ethanoligenens	163.5575	-3.54083	0.860487	-4.11491	3.87E-05	0.005312
Candidatus Methylopum	10.2439	-3.35361	0.913911	-3.66951	0.000243	0.016664
Bacterioplanes	5.789919	-2.72224	0.791907	-3.43758	0.000587	0.030593
Woeseia	15.14639	-2.23886	0.678729	-3.29861	0.000972	0.042399
Libanicoccus	41.11011	-2.09786	0.63149	-3.32208	0.000893	0.040846
Geoalkalibacter	27.14344	-1.75151	0.54039	-3.2412	0.00119	0.049682

Genera more abundant in lesional skin

	baseMean	log2FoldCh	lfcSE	stat	pvalue	padj
Ehrlichia	25.47551	3.021406	0.864775	3.493865	0.000476	0.027079
Phietavirus	3547.438	2.889099	0.827362	3.491942	0.00048	0.027079
Carnobacterium	733.7274	2.671146	0.63576	4.201503	2.65E-05	0.004242
Borrelia	80.47319	2.539091	0.533238	4.761648	1.92E-06	0.000854
Spiroplasma	163.5803	1.973828	0.455042	4.337681	1.44E-05	0.002765
Arcobacter	217.1963	1.918119	0.390478	4.912236	9.00E-07	0.000854
Aquimarina	51.55159	1.812231	0.474958	3.815559	0.000136	0.01087
Mycoplasma	254.5904	1.803441	0.389037	4.63565	3.56E-06	0.000854
Methanosarcina	98.02084	1.755386	0.374929	4.68192	2.84E-06	0.000854
Rickettsia	59.45872	1.709544	0.50009	3.418475	0.00063	0.030593
Brachyspira	95.83986	1.682075	0.492526	3.415198	0.000637	0.030593
Francisella	102.4188	1.631129	0.409995	3.978414	6.94E-05	0.0074
Bacillus	4037.308	1.514815	0.429665	3.525576	0.000423	0.027044
Lacinutrix	49.17966	1.49295	0.385011	3.877684	0.000105	0.009203
Helicobacter	100.1122	1.387951	0.354711	3.912911	9.12E-05	0.008754
Polaribacter	145.6738	1.330483	0.358039	3.716032	0.000202	0.014945
Clostridium	1611.695	1.255679	0.310157	4.04853	5.15E-05	0.006185

Leptospira	81.04342	1.253418	0.453659	2.762906	0.005729	0.143946
Cloacibacillus	10.63198	-2.06765	0.75993	-2.72084	0.006512	0.148837
Acidobacterium	43.12249	-1.46647	0.542088	-2.70522	0.006826	0.152391
Archaeoglobus	9.770977	-1.83289	0.682889	-2.68402	0.007274	0.158713
Thiomonas	445.7656	-1.054	0.396951	-2.65523	0.007925	0.163264
Tenacibaculum	80.85238	0.948289	0.358488	2.645245	0.008163	0.163264
Bartonella	85.77432	0.856866	0.323589	2.648008	0.008097	0.163264
Acidianus	11.92358	3.388747	1.273524	2.660921	0.007793	0.163264
Afipia	230.3713	-0.95513	0.37484	-2.5481	0.010831	0.169077
Moorella	20.29407	-1.41409	0.554495	-2.55023	0.010765	0.169077
Halobacillus	20.68037	-1.63309	0.637375	-2.56221	0.010401	0.169077
Steroidobacter	35.70928	-1.14688	0.449578	-2.55101	0.010741	0.169077
Desulfomicrobiur	40.99859	-1.10382	0.434034	-2.54316	0.010985	0.169077
Aeromonas	630.9045	-0.51952	0.20456	-2.53967	0.011096	0.169077
Desulfovibrio	341.01	-0.5945	0.227572	-2.61235	0.008992	0.169077
Pseudoalteromor	180.2689	0.733389	0.281944	2.601184	0.00929	0.169077
Laribacter	57.86705	-0.86796	0.340673	-2.54779	0.010841	0.169077
Halomicrobium	8.741374	-2.2648	0.88865	-2.54859	0.010816	0.169077
Virgibacillus	96.14603	0.849969	0.331786	2.561803	0.010413	0.169077
Nostoc	204.0961	0.801683	0.315598	2.540205	0.011079	0.169077
Epibacterium	19.63941	-1.52355	0.59004	-2.58211	0.00982	0.169077
Cyanothece	54.71629	0.714488	0.275874	2.589905	0.0096	0.169077
Brucella	41.4629	-1.14585	0.4509	-2.54126	0.011045	0.169077
Methanocaldococ	18.18896	2.375016	0.937671	2.532888	0.011313	0.169691
Hyphomonas	62.48402	-0.83637	0.332232	-2.51742	0.011822	0.172938
Halobiforma	15.8217	-1.6813	0.668403	-2.51541	0.01189	0.172938
Methanosphaera	12.95317	3.218215	1.292264	2.49037	0.012761	0.173906
Halogeometricur	7.303584	-2.36144	0.944453	-2.50033	0.012408	0.173906
Marinithermus	47.39235	-1.11278	0.447335	-2.48757	0.012862	0.173906
Pontimonas	27.66046	-1.49431	0.598924	-2.49499	0.012596	0.173906
Indioceanicola	57.48856	-0.78858	0.314937	-2.50393	0.012282	0.173906
Sorangium	473.9773	-0.81992	0.332045	-2.46929	0.013538	0.175628
Fischerella	49.86579	1.469589	0.594013	2.473999	0.013361	0.175628
Tolomonas	7.402814	-1.87582	0.758835	-2.47198	0.013437	0.175628
Rhodospirillum	112.4971	-0.7312	0.296982	-2.46211	0.013812	0.176795
Methylorubrum	574.0359	-0.6609	0.270565	-2.44266	0.014579	0.184162
Halothiobacillus	37.58879	-0.94776	0.389469	-2.43346	0.014955	0.186336
Thauera	733.7273	-0.71709	0.295219	-2.42902	0.01514	0.186336
Geobacter	312.5122	-0.68723	0.283527	-2.42386	0.015357	0.186612
Candidatus Promi	34.15326	-1.01379	0.420123	-2.41307	0.015819	0.189824

Jeongeupia	67.26958	-0.98635	0.410362	-2.4036	0.016235	0.192409
Simplexvirus	14.61451	-2.55715	1.07604	-2.37644	0.017481	0.195132
Gemmatirosa	124.4254	-0.87057	0.364172	-2.39055	0.016823	0.195132
Cystobacter	129.053	-0.6539	0.274407	-2.38297	0.017174	0.195132
Vogesella	71.62203	-0.8434	0.353409	-2.38647	0.017011	0.195132
Komagataeibacte	143.6393	-0.58249	0.244901	-2.37845	0.017385	0.195132
Wolbachia	22.09465	1.117979	0.471388	2.371673	0.017708	0.195396
Haloplanus	38.96758	-1.17504	0.501371	-2.34365	0.019096	0.20479
Bradymonas	22.48771	-1.22476	0.523035	-2.34164	0.019199	0.20479
Micavibrio	10.49342	-2.10025	0.893942	-2.34943	0.018802	0.20479
Slackia	48.38209	-1.5114	0.647105	-2.33563	0.01951	0.205825
Ferrimonas	15.51851	-1.24172	0.541744	-2.29208	0.021901	0.20613
Thermaerobacter	62.1009	-0.81671	0.356052	-2.29381	0.021802	0.20613
Natronomonas	16.84829	-1.43567	0.61741	-2.3253	0.020056	0.20613
Sphaerobacter	55.41318	-0.95517	0.416403	-2.29386	0.021799	0.20613
Rubrobacter	158.1838	-1.10424	0.481669	-2.29253	0.021875	0.20613
Methyloceanibac	62.02076	-0.82494	0.357686	-2.30633	0.021092	0.20613
Archangium	106.2168	-0.79982	0.348171	-2.29722	0.021606	0.20613
Salinicola	64.5992	-0.98068	0.425165	-2.30659	0.021078	0.20613
Legionella	113.2075	0.694169	0.302236	2.296778	0.021631	0.20613
Myroides	46.73626	1.076776	0.466717	2.307128	0.021048	0.20613
Pannonibacter	139.8627	-0.69126	0.301074	-2.29599	0.021677	0.20613
Phycisphaera	42.482	-1.0042	0.44025	-2.28098	0.022549	0.208148
Sedimenticola	14.07082	-1.53717	0.673271	-2.28314	0.022422	0.208148
Dokdonia	20.0812	1.427801	0.633963	2.252182	0.024311	0.212045
Bradyrhizobium	5158.38	-0.70608	0.314527	-2.24488	0.024776	0.212045
Gloeobacter	118.3552	-0.80306	0.357112	-2.24876	0.024528	0.212045
Methanobacteriu	22.60309	1.894599	0.848487	2.232915	0.025555	0.212045
Lacunisphaera	55.63255	-1.20287	0.534934	-2.24863	0.024536	0.212045
Porphyromonas	2149.603	-1.35095	0.606198	-2.22856	0.025843	0.212045
Granulibacter	46.05282	-0.73531	0.328054	-2.24144	0.024997	0.212045
Orrella	110.94	-0.80218	0.354933	-2.26009	0.023816	0.212045
Candidatus Arthr	26.48728	2.041317	0.912603	2.236807	0.025299	0.212045
Methyloversatilis	68.60885	-0.80521	0.358745	-2.24451	0.0248	0.212045
Syntrophobacter	12.67065	-1.57621	0.703203	-2.24147	0.024996	0.212045
Anabaena	28.90293	1.545317	0.687725	2.246999	0.02464	0.212045
Marinobacterium	22.36146	-1.01973	0.457509	-2.22887	0.025823	0.212045
Myxococcus	451.1725	-0.6487	0.293734	-2.20846	0.027213	0.214868
Methanobrevibac	59.5735	1.357094	0.611469	2.219397	0.02646	0.214868
Advenella	41.2729	-0.75429	0.341752	-2.20711	0.027306	0.214868

Salipiger	72.60733	-0.80741	0.365403	-2.20963	0.027131	0.214868
Jonquetella	93.82533	-1.97429	0.892681	-2.21164	0.026992	0.214868
Acidiferrobacter	28.99224	-1.06207	0.483141	-2.19827	0.02793	0.21799
Mesorhizobium	932.254	-0.66653	0.306754	-2.17286	0.029791	0.219356
Cellulophaga	46.20234	0.901237	0.415276	2.170213	0.029991	0.219356
Pseudorhodoplasma	65.24289	-0.85057	0.393346	-2.16239	0.030588	0.219356
Anaeromyxobacter	258.8735	-0.72902	0.33354	-2.18572	0.028836	0.219356
Alistipes	375.4841	-1.22787	0.567936	-2.162	0.030618	0.219356
Herbaspirillum	798.2509	-0.65831	0.303927	-2.16601	0.030311	0.219356
Ferropasma	5.551802	3.120732	1.434183	2.175965	0.029558	0.219356
Nitratireductor	47.69866	-0.82635	0.380426	-2.17217	0.029843	0.219356
Cupriavidus	8028.509	-0.76613	0.352057	-2.17615	0.029544	0.219356
Gibbsiella	29.11858	-1.02172	0.471412	-2.16736	0.030207	0.219356
Brenneria	31.349	-0.9116	0.421625	-2.16211	0.030609	0.219356
Filimonas	69.44225	-0.80753	0.374392	-2.15691	0.031013	0.220536
Candidatus Bloch	26.26265	1.798287	0.834915	2.153856	0.031251	0.220598
Azoarcus	646.684	-0.64346	0.299556	-2.14805	0.03171	0.222199
Sulfuriferula	16.82915	-1.32655	0.618781	-2.14381	0.032048	0.222941
Cyanobium	88.39987	-0.87717	0.415904	-2.10907	0.034939	0.223968
Nitrospira	75.57332	-0.77595	0.363712	-2.13341	0.032891	0.223968
Methylosinus	47.4255	-1.01026	0.478837	-2.10983	0.034873	0.223968
Methylobacillus	19.14536	-1.4755	0.700711	-2.10572	0.035228	0.223968
Candidatus Solibacter	55.41394	-0.79361	0.374087	-2.12147	0.033882	0.223968
Ectothiorhodospira	27.76752	-0.97788	0.46026	-2.12462	0.033618	0.223968
Formosa	30.51289	1.140292	0.539052	2.115366	0.034399	0.223968
Desulfurivibrio	12.58888	-1.51005	0.711095	-2.12355	0.033708	0.223968
Phaeobacter	150.1708	-0.65263	0.305508	-2.13623	0.032661	0.223968
Chlorobaculum	51.7495	-0.74684	0.354557	-2.10639	0.03517	0.223968
Chelativorans	52.82142	-0.76361	0.35817	-2.13198	0.033008	0.223968
Stackebrandtia	111.868	-0.5748	0.272191	-2.11176	0.034707	0.223968
Massilia	1680.355	-0.60145	0.282348	-2.13017	0.033158	0.223968
Pseudoflavitalea	80.35848	-0.81824	0.390272	-2.09659	0.03603	0.227559
Mycolicibacter	193.9833	-0.67486	0.322552	-2.09224	0.036417	0.228498
Pseudogulbenkia	82.14934	-0.73953	0.355323	-2.0813	0.037407	0.232491
Parvibaculum	40.20128	-0.72275	0.347817	-2.07795	0.037714	0.232491
Symbiobacterium	62.55812	-0.9495	0.45726	-2.07649	0.037848	0.232491
Collimonas	497.5483	-0.63201	0.305023	-2.07201	0.038264	0.232491
Devosia	166.7052	-0.64637	0.311736	-2.07346	0.038129	0.232491
Desulfuromonas	70.57741	-0.68232	0.330353	-2.06542	0.038883	0.2333
Acidisphaera	49.36085	-0.7916	0.382843	-2.06769	0.038669	0.2333

Chondromyces	115.8496	-0.7686	0.372774	-2.06183	0.039224	0.233881
Xylanimonas	125.6071	-0.67288	0.327764	-2.05295	0.040077	0.234598
Gluconacetobact	55.45683	-0.71787	0.349444	-2.05432	0.039945	0.234598
Devriesea	55.70677	-0.94182	0.457918	-2.05675	0.039711	0.234598
Sulfuricaulis	34.18265	-1.00417	0.492142	-2.0404	0.04131	0.234663
Flavisolibacter	47.31715	-0.97915	0.478143	-2.04781	0.040578	0.234663
Wenzhouxiangell	43.00072	-0.89854	0.439565	-2.04416	0.040937	0.234663
Clostridioides	424.9304	0.840729	0.410104	2.050038	0.040361	0.234663
Acetobacter	90.27825	-0.42794	0.209659	-2.04112	0.041239	0.234663
Pseudolabrys	103.1281	-0.72501	0.356408	-2.03421	0.041931	0.236785
Candidatus Accur	91.22169	-0.88756	0.436969	-2.03118	0.042236	0.237116
Tistrella	99.16057	-0.76096	0.377893	-2.0137	0.044041	0.240089
Chelatococcus	160.2895	-0.74279	0.36825	-2.01708	0.043687	0.240089
Dokdonella	144.6886	-0.68459	0.340002	-2.01348	0.044064	0.240089
Leadbetterella	8.325436	-1.77524	0.884525	-2.007	0.04475	0.240089
Rubinisphaera	9.666133	-1.56168	0.778819	-2.00519	0.044943	0.240089
Ahniella	17.03069	-1.10693	0.553925	-1.99834	0.04568	0.240089
Chloroflexus	18.69939	-1.17756	0.58883	-1.99983	0.045518	0.240089
Paucibacter	569.7574	-0.77172	0.386337	-1.99754	0.045767	0.240089
Burkholderia	18667.47	-0.71704	0.356274	-2.01261	0.044156	0.240089
Aliivibrio	38.31409	0.927995	0.461359	2.011438	0.044279	0.240089
Maricaulis	20.0503	-0.87256	0.432159	-2.01908	0.043479	0.240089
Vitreoscilla	121.5844	-0.54446	0.271794	-2.0032	0.045156	0.240089
Neorhizobium	142.5557	-0.5686	0.285324	-1.99283	0.04628	0.241462
Sagittula	65.33639	-0.75065	0.378691	-1.98223	0.047453	0.244577
Rubrivivax	611.6802	-0.73353	0.369719	-1.98403	0.047252	0.244577
Achromobacter	1689.016	-0.62016	0.313125	-1.98055	0.047641	0.244577
Methylocaldum	45.01062	-0.77012	0.391451	-1.96734	0.049144	0.245194
Elizabethkingia	113.2991	0.634719	0.322548	1.967828	0.049088	0.245194
Sulfurifustis	49.80448	-0.68434	0.34808	-1.96604	0.049294	0.245194
Mesoplasma	40.46939	1.22521	0.621594	1.971078	0.048715	0.245194
Thioalkalivibrio	156.9496	-0.58012	0.293536	-1.97633	0.048117	0.245194
Cedecea	40.74216	-0.83808	0.424855	-1.97263	0.048537	0.245194
Maribacter	46.62286	0.730065	0.371891	1.963114	0.049633	0.245606
Rhodoplanes	112.8927	-0.69361	0.354448	-1.95688	0.050361	0.247077
Curvibacter	139.6121	-0.73863	0.37759	-1.95617	0.050445	0.247077
Turneriella	8.96966	-1.4888	0.762086	-1.95358	0.050751	0.247312
Rhodopseudomon	778.3759	-0.57641	0.296206	-1.94598	0.051657	0.247955
Rhizobacter	453.5193	-0.74037	0.379925	-1.94873	0.051328	0.247955
Pandoraea	1478.395	-0.67718	0.347918	-1.94637	0.05161	0.247955

Methylophilus	13.61224	-1.74809	0.899734	-1.9429	0.052029	0.248363
Ochrobactrum	170.5509	-0.61067	0.314619	-1.94099	0.05226	0.248363
Roseateles	518.5792	-0.70517	0.364454	-1.93487	0.053006	0.250671
Natronolimnobiu:	23.26903	-0.99738	0.516692	-1.93033	0.053566	0.252078
Granulicella	93.84629	-0.76294	0.39641	-1.92462	0.054277	0.254175
Pseudoxanthomo	316.8727	-0.71168	0.371791	-1.91419	0.055596	0.25456
Paraburkholderia	15417.11	-0.74867	0.390775	-1.91585	0.055384	0.25456
Delftia	1555.15	-0.70693	0.36838	-1.91901	0.054983	0.25456
Thermoanaeroba	37.15048	0.746871	0.390318	1.913493	0.055685	0.25456
Blastochloris	63.76894	-0.90388	0.47089	-1.91952	0.054919	0.25456
Paenarthrobacter	76.81581	-1.76286	0.923065	-1.90979	0.05616	0.254994
Yoonia	21.89708	-1.03067	0.540009	-1.90862	0.056311	0.254994
Azospirillum	778.9391	-0.56058	0.294412	-1.90406	0.056903	0.256463
Natronococcus	14.01703	-1.52122	0.802748	-1.89502	0.05809	0.256987
Thermogutta	6.411926	-1.66117	0.875258	-1.89792	0.057707	0.256987
Dyella	290.4147	-0.67369	0.35507	-1.89736	0.057781	0.256987
Fluviicola	7.312008	-1.59974	0.843384	-1.89682	0.057852	0.256987
Buchnera	70.97009	0.925068	0.489169	1.891101	0.058611	0.258103
Kosakonia	198.3499	-0.49222	0.264205	-1.86301	0.06246	0.258456
Bordetella	1571.313	-0.59712	0.31775	-1.87921	0.060216	0.258456
Desulfobulbus	29.63642	-0.77608	0.416276	-1.86434	0.062274	0.258456
Croceicoccus	125.6041	-0.56563	0.299821	-1.88655	0.05922	0.258456
Kitasatospora	336.0383	-0.51717	0.276719	-1.86895	0.06163	0.258456
Chromobacterium	392.6793	-0.5379	0.286688	-1.87627	0.060618	0.258456
Variibacter	46.31126	-0.74502	0.396317	-1.87987	0.060126	0.258456
Ferriphaselus	27.95294	-0.827	0.440019	-1.87946	0.060182	0.258456
Nocardiosis	313.4314	-0.53309	0.28353	-1.88018	0.060083	0.258456
Ensifer	169.7203	-0.57857	0.309784	-1.86767	0.061808	0.258456
Bosea	481.2075	-0.59804	0.320354	-1.86681	0.061928	0.258456
Melittangium	73.54086	-0.67814	0.36346	-1.86579	0.062071	0.258456
Spiribacter	25.58719	-0.7731	0.414676	-1.86435	0.062273	0.258456
Thermomicrobiur	10.75552	-1.50948	0.806675	-1.87123	0.061313	0.258456
Conexibacter	151.7755	-0.59587	0.321249	-1.85484	0.063618	0.262119
Melaminivora	669.0389	-0.75691	0.409044	-1.85044	0.064251	0.263593
Sandaracinus	143.1197	-0.57835	0.313783	-1.84316	0.065306	0.263666
Thiobacillus	96.75577	-0.8395	0.454866	-1.84559	0.064951	0.263666
Frateuria	39.77691	-0.73193	0.397199	-1.84274	0.065367	0.263666
Acidiphilium	110.6314	-0.54375	0.294388	-1.84705	0.064739	0.263666
Kushneria	44.51929	-0.73402	0.400412	-1.83316	0.066778	0.264436
Niveispirillum	61.17711	-0.76183	0.415173	-1.83496	0.066511	0.264436

Asticcacaulis	27.23792	-1.06478	0.581177	-1.83211	0.066935	0.264436
Limnohabitans	190.6227	-0.68641	0.373547	-1.83755	0.066128	0.264436
Mannheimia	24.58925	-1.11724	0.608252	-1.8368	0.06624	0.264436
Thermosediminib	5.90939	-2.08347	1.150003	-1.81171	0.070032	0.271234
Niabella	82.58798	-0.70597	0.390114	-1.80964	0.070351	0.271234
Agrobacterium	511.7324	-0.52336	0.289021	-1.81079	0.070174	0.271234
Aureimonas	67.04548	-0.80759	0.444321	-1.81759	0.069127	0.271234
Vulgatibacter	68.08027	-0.83881	0.462113	-1.81516	0.069499	0.271234
Lysobacter	595.4976	-0.55895	0.308274	-1.81316	0.069807	0.271234
Polaromonas	1013.321	-0.60771	0.337323	-1.80156	0.071615	0.271239
Halobacterium	48.42077	-0.70646	0.392646	-1.79923	0.071983	0.271239
Rufibacter	47.95847	-0.70709	0.392251	-1.80265	0.071444	0.271239
Zymobacter	19.72757	-1.18671	0.656752	-1.80694	0.070772	0.271239
Dietzia	9419.783	-1.0078	0.560796	-1.79709	0.072322	0.271239
Rivularia	13.85698	1.799637	1.002441	1.795256	0.072613	0.271239
Deferribacter	6.185401	2.550149	1.41592	1.801054	0.071694	0.271239
Limnochorda	67.30247	-0.64858	0.360927	-1.79699	0.072338	0.271239
Candidatus Korib	50.42796	-0.80547	0.449321	-1.79265	0.073029	0.27142
Actinomadura	91.658	-0.56901	0.317944	-1.78965	0.073509	0.27142
Nitrospira	27.26096	-0.86793	0.484903	-1.7899	0.07347	0.27142
Magnetospira	18.65446	-0.90898	0.50869	-1.78691	0.073951	0.272005
Planococcus	127.4786	0.601173	0.337331	1.782146	0.074725	0.273803
Rhodanobacter	127.6883	-0.6433	0.361446	-1.77978	0.075111	0.27417
Thiolapillus	11.5739	-1.38529	0.785306	-1.76401	0.07773	0.274342
Thermanaerovibr	9.907115	-1.80291	1.015034	-1.77621	0.075698	0.274342
Allochromatium	47.06659	-0.70008	0.395884	-1.76841	0.076992	0.274342
Serpentinomonas	262.5297	-0.63823	0.361723	-1.76441	0.077663	0.274342
Verminephrobact	324.6197	-0.74309	0.418675	-1.77486	0.075921	0.274342
Gilliamella	16.32456	1.545782	0.872776	1.771109	0.076543	0.274342
Luteitalea	92.89886	-0.55656	0.314459	-1.7699	0.076743	0.274342
Acidovorax	6003.767	-0.60607	0.343369	-1.76508	0.07755	0.274342
Singulisphaera	49.37911	-0.64	0.361387	-1.77096	0.076568	0.274342
Rhizobium	1416.802	-0.36211	0.20606	-1.75732	0.078863	0.276309
Variovorax	3512.527	-0.62281	0.354321	-1.75776	0.078788	0.276309
Phenylobacterium	187.5564	-0.64792	0.371692	-1.74317	0.081304	0.282796
Hungateiclostridi	41.18104	0.802613	0.460245	1.743882	0.08118	0.282796
Vibrio	420.333	0.401826	0.231315	1.737136	0.082363	0.285446
Acidimicrobium	25.16354	-1.1917	0.687232	-1.73405	0.082909	0.286304
Sulfuritalea	135.3515	-0.79804	0.46169	-1.72851	0.083897	0.287719
Denitrobacterium	11.47692	-1.5346	0.887877	-1.72839	0.083918	0.287719

Gordonibacter	153.9833	-0.72076	0.419596	-1.71774	0.085844	0.291288
Mitsuaria	819.3828	-0.62757	0.364904	-1.71982	0.085466	0.291288
Candidatus Kinet	35.21797	1.172157	0.682438	1.717602	0.085869	0.291288
Thermobifida	57.5563	-0.72651	0.424846	-1.71006	0.087255	0.294947
Rhodoferax	1121.966	-0.59781	0.350256	-1.70678	0.087862	0.295958
Castellaniella	129.6143	-0.64844	0.380375	-1.70473	0.088246	0.296209
Alicyclophilus	1020.301	-0.64593	0.379923	-1.70017	0.0891	0.296911
Hydrogenophaga	1069.722	-0.59624	0.350435	-1.70143	0.088862	0.296911
Peptoclostridium	8.843755	-2.08298	1.226246	-1.69866	0.089382	0.296911
Rhodobaca	13.22583	-1.21724	0.71763	-1.69619	0.089849	0.297432
Thermus	153.6987	-0.527	0.310997	-1.69455	0.090161	0.297438
Marinomonas	30.17464	0.80757	0.479325	1.684808	0.092026	0.298462
Sporosarcina	55.60376	0.657001	0.38975	1.685697	0.091854	0.298462
Gemmata	107.905	-0.56589	0.335225	-1.68808	0.091395	0.298462
Mariprofundus	7.834838	-1.28739	0.761431	-1.69074	0.090886	0.298462
Sinorhizobium	490.7736	-0.47417	0.281229	-1.68605	0.091787	0.298462
Oligotropha	90.01068	-0.77974	0.464765	-1.67771	0.093404	0.301911
Alcanivorax	161.4023	-0.48228	0.288127	-1.67384	0.094162	0.302375
Magnetospirillum	488.3525	-0.6694	0.400321	-1.67216	0.094492	0.302375
Blattabacterium	32.66303	1.094536	0.654257	1.672943	0.094338	0.302375
Alkalilimnicola	32.27428	-0.63525	0.382143	-1.66235	0.096443	0.303025
Haloarcula	29.28672	-0.81902	0.49203	-1.66457	0.095999	0.303025
Thermosiphon	12.52226	1.463608	0.877147	1.668601	0.095196	0.303025
Acaryochloris	10.85162	-1.4515	0.873548	-1.66162	0.096589	0.303025
Halotalea	41.1766	-0.9798	0.587813	-1.66685	0.095544	0.303025
Sneathia	16.14543	-1.69359	1.016795	-1.66562	0.09579	0.303025
Caulobacter	688.5792	-0.53217	0.321342	-1.65609	0.097704	0.30467
Tsukamurella	494.9575	-0.64285	0.388224	-1.65587	0.097748	0.30467
Candidatus Desul	9.400194	-1.28019	0.774435	-1.65306	0.098318	0.305455
Stappia	47.90579	-0.73386	0.449393	-1.63301	0.102467	0.306748
Fronidhabitans	221.1655	-0.46043	0.280624	-1.64074	0.100851	0.306748
Streptacidiphilus	89.24745	-0.56474	0.344035	-1.64151	0.100692	0.306748
Jeotgalibaca	19.98855	-1.04047	0.634783	-1.6391	0.101193	0.306748
Neisseria	2840.677	-0.78107	0.47876	-1.63144	0.102797	0.306748
Roseiflexus	33.92029	-0.83716	0.507554	-1.6494	0.099066	0.306748
Dyadobacter	35.46747	-0.84485	0.516144	-1.63685	0.101661	0.306748
Micromonospora	1364.13	-0.41423	0.254208	-1.6295	0.103208	0.306748
Desulfococcus	24.65118	-0.82762	0.504174	-1.64153	0.100687	0.306748
Comamonas	1259.088	-0.54932	0.33533	-1.63815	0.101389	0.306748
Aminomonas	10.3649	-1.08235	0.663017	-1.63246	0.102582	0.306748

Oceanimonas	28.6045	-0.64389	0.394901	-1.63051	0.102994	0.306748
Breoghanina	48.02763	-0.90401	0.552102	-1.63739	0.101548	0.306748
Paucimonas	25.36404	-0.68265	0.416786	-1.63788	0.101446	0.306748
Trichodesmium	13.84461	1.405047	0.863261	1.627604	0.103609	0.306989
Sideroxydans	36.10873	-0.70009	0.431212	-1.62354	0.104474	0.30756
Sulfurimonas	11.0008	1.712359	1.055584	1.622191	0.104762	0.30756
Luteimonas	205.0794	-0.56489	0.347741	-1.62445	0.104279	0.30756
Simiduia	8.46266	-1.38666	0.856424	-1.61912	0.105421	0.308549
Anderseniella	17.65278	-0.79522	0.492859	-1.61347	0.106642	0.31023
Methylovorus	30.46046	-0.74115	0.459252	-1.61381	0.106568	0.31023
Micropruina	154.3115	-0.49598	0.308838	-1.60594	0.108287	0.314065
Bacteroides	3025.104	-0.90569	0.5646	-1.60413	0.108685	0.314271
Liberibacter	15.84691	1.269955	0.806556	1.574541	0.115362	0.315512
Eggerthella	68.18041	-0.65566	0.410999	-1.59529	0.110647	0.315512
Mycolicibacteriur	3265.406	-0.58133	0.366721	-1.5852	0.112921	0.315512
Aromatoleum	102.501	-0.70461	0.447459	-1.57468	0.11533	0.315512
Prauserella	85.67317	-0.5622	0.356667	-1.57626	0.114966	0.315512
Beutenbergia	99.82996	-0.60261	0.377617	-1.59582	0.11053	0.315512
Crenobacter	62.42948	-0.65318	0.415436	-1.57228	0.115885	0.315512
Desulfarculus	45.02333	-0.82201	0.516318	-1.59207	0.11137	0.315512
Plantibacter	252.2058	-0.49035	0.309368	-1.585	0.112967	0.315512
Simplicispira	284.2342	-0.57333	0.360949	-1.5884	0.112197	0.315512
Porphyrobacter	141.2203	-0.50712	0.318279	-1.59331	0.11109	0.315512
Solitalea	37.35774	-1.28926	0.823244	-1.56607	0.117331	0.315512
Janthinobacteriur	780.3968	-0.48604	0.310323	-1.56623	0.117295	0.315512
Thermobacillus	32.06261	-0.78996	0.503164	-1.56999	0.116417	0.315512
Kozakia	9.323654	-1.06482	0.67927	-1.5676	0.116975	0.315512
Mucinivorans	5.741704	-1.95435	1.236171	-1.58097	0.113885	0.315512
Parasaccharibact	7.684368	-1.35842	0.859887	-1.57977	0.11416	0.315512
Methylococcus	53.71728	-0.75524	0.481175	-1.56958	0.116512	0.315512
Methylocystis	86.04393	-0.47856	0.302916	-1.57985	0.114141	0.315512
Microvirga	156.3065	-0.5223	0.331669	-1.57477	0.11531	0.315512
Streptomyces	8440.292	-0.40591	0.257595	-1.57575	0.115084	0.315512
Oscillatoria	34.32137	1.084893	0.683101	1.588189	0.112244	0.315512
Aquitalea	47.60303	-0.63122	0.400339	-1.57672	0.11486	0.315512
Caldicellulosirupt	42.85725	0.651303	0.408316	1.595097	0.110691	0.315512
Brevirhabdus	42.96909	-0.67892	0.427887	-1.58668	0.112585	0.315512
Opiritutus	103.4462	-0.5788	0.370168	-1.56362	0.117907	0.316176
Spirosoma	130.3614	-0.52494	0.337087	-1.55728	0.119404	0.317529
Aminobacter	151.2694	-0.54933	0.352594	-1.55796	0.119242	0.317529

Mycobacterium	3167.247	-0.44948	0.288392	-1.55857	0.119098	0.317529
Flavonifractor	122.3365	-0.93309	0.604231	-1.54425	0.122527	0.318848
Lysinibacillus	100.336	0.541454	0.35095	1.542826	0.122873	0.318848
Lutibacter	36.51368	1.003283	0.647099	1.550432	0.121038	0.318848
Bdellovibrio	21.92616	-0.60652	0.393016	-1.54324	0.122772	0.318848
Hermiimonas	93.62754	-0.70739	0.457704	-1.54552	0.122222	0.318848
Anaerolinea	5.946591	-1.48152	0.957383	-1.54746	0.121752	0.318848
Granulosicoccus	8.678677	-1.09264	0.706538	-1.54647	0.121991	0.318848
Synechococcus	226.2131	-0.37532	0.24328	-1.54276	0.122889	0.318848
Marichromatium	51.64636	-0.53827	0.347987	-1.54682	0.121908	0.318848
Luteibacter	66.77889	-0.49048	0.320572	-1.53002	0.126011	0.326066
Thermomonospor	84.25941	-0.5218	0.341396	-1.52842	0.126407	0.326213
Arcanobacterium	109.1227	-0.60312	0.395065	-1.52663	0.126853	0.326485
Heliobacterium	23.10674	-0.91697	0.601327	-1.52492	0.12728	0.326707
Salinarchaeum	10.51623	-1.19637	0.785261	-1.52354	0.127625	0.326719
Aggregatibacter	285.427	-0.68625	0.45207	-1.51801	0.129012	0.329393
Hoefflea	52.81625	-0.77849	0.514608	-1.51278	0.130337	0.331892
Gardnerella	228.2962	0.802323	0.531983	1.508175	0.13151	0.333993
Fuerstia	12.26034	-1.08205	0.719845	-1.50317	0.132796	0.336369
Leptothrix	476.7861	-0.62402	0.415606	-1.50148	0.133233	0.336588
Plesiomonas	16.48269	-1.0884	0.726257	-1.49864	0.133968	0.336674
Ramlibacter	1006.324	-0.60157	0.4014	-1.49867	0.13396	0.336674
Thermobispora	84.75912	-0.58264	0.391626	-1.48774	0.13682	0.342944
Tateyamaria	18.62216	-0.94075	0.633354	-1.48534	0.137453	0.343632
Flavobacterium	417.6975	0.444914	0.30068	1.479691	0.138956	0.343808
Sebaldella	12.09359	1.426539	0.963732	1.480223	0.138814	0.343808
Pluralibacter	61.44361	-0.41927	0.283243	-1.48025	0.138808	0.343808
Thalassolituus	8.763348	-1.51132	1.020218	-1.48137	0.138507	0.343808
Fimbriimonas	23.77555	-0.73611	0.49915	-1.47473	0.140285	0.346204
Truepera	30.88298	-0.57713	0.393048	-1.46834	0.142011	0.348671
Methylibium	529.3567	-0.59143	0.402472	-1.46949	0.141699	0.348671
Niastella	104.1593	-0.61507	0.419745	-1.46534	0.142829	0.349786
Microchaete	6.663545	3.388553	2.322399	1.459075	0.144545	0.350784
Oceanicoccus	6.852549	-1.73604	1.190277	-1.45852	0.144698	0.350784
Nonomuraea	213.2137	-0.45146	0.308853	-1.46174	0.143813	0.350784
Rhodobacter	531.8622	-0.46941	0.321438	-1.46034	0.144197	0.350784
Frankia	495.9309	-0.41858	0.289627	-1.44524	0.148391	0.357928
Alicyclobacillus	93.74074	-0.6014	0.41577	-1.44647	0.148045	0.357928
Pseudodesulfovibrio	86.34167	-0.50018	0.346589	-1.44314	0.148982	0.358453
Rhodovulum	149.083	-0.56047	0.390841	-1.43401	0.151569	0.359274

Planctomyces	136.9156	-0.4096	0.28559	-1.43423	0.151506	0.359274
Diaphorobacter	729.2216	-0.68594	0.477666	-1.43602	0.150998	0.359274
Beijerinckia	17.47694	-0.89754	0.624575	-1.43705	0.150704	0.359274
Hydrogenophilus	33.03657	0.897275	0.623695	1.438643	0.150252	0.359274
Tatumella	22.86477	-0.96627	0.672007	-1.43789	0.150466	0.359274
Kiritimatiella	23.25193	-0.83481	0.582857	-1.43228	0.152065	0.359563
Dermabacter	1539.663	-0.67627	0.472976	-1.42982	0.152768	0.360336
Oceanisphaera	8.411693	-1.41204	0.990287	-1.42589	0.153901	0.361712
Streptosporangiu	202.8271	-0.42024	0.294868	-1.42518	0.154104	0.361712
Microcoleus	11.26762	-1.47964	1.041496	-1.42069	0.155408	0.363883
Chitinophaga	102.3824	-0.38957	0.2747	-1.41817	0.15614	0.364706
Zobellella	56.05209	-0.69537	0.491608	-1.41448	0.157221	0.36634
Ketogulonicigeni	47.94712	-0.50846	0.361179	-1.40778	0.159196	0.369731
Halorubrum	50.22931	-0.64188	0.456229	-1.40693	0.159447	0.369731
Lentibacillus	9.182485	-1.30728	0.930704	-1.40461	0.160137	0.370437
Pelagibacterium	35.09947	-0.60874	0.434429	-1.40125	0.16114	0.37097
Trueperella	136.1428	-0.46537	0.332038	-1.40157	0.161045	0.37097
Lentzea	138.2869	-0.40304	0.288127	-1.39884	0.161862	0.371502
Actinoplanes	723.5694	-0.43783	0.313206	-1.39789	0.162145	0.371502
Thiocystis	39.71191	-0.78858	0.56524	-1.39512	0.16298	0.372525
Thiodictyon	61.75158	-0.48906	0.355188	-1.3769	0.168542	0.372746
Celeribacter	148.6785	-0.44398	0.324	-1.37032	0.170586	0.372746
Maritalea	11.21589	-1.20074	0.867834	-1.3836	0.16648	0.372746
Haloferax	42.57577	-0.52097	0.375955	-1.38571	0.165834	0.372746
Sutterella	29.87603	-0.64539	0.468072	-1.37883	0.167946	0.372746
Auritidibacter	169.7226	-0.53984	0.394636	-1.36795	0.171327	0.372746
Saccharomonosp	472.9596	-0.47287	0.345885	-1.36713	0.171586	0.372746
Pseudovibrio	6.632825	-1.04648	0.751115	-1.39324	0.163547	0.372746
Marinobacter	171.5936	-0.28829	0.210129	-1.37195	0.17008	0.372746
Rhodothermus	57.40825	-0.63381	0.463264	-1.36814	0.171269	0.372746
Acidothermus	26.64245	-0.8367	0.61206	-1.36702	0.171618	0.372746
Amycolatopsis	922.209	-0.4428	0.322974	-1.37102	0.170369	0.372746
Halanaerobium	23.70768	0.801699	0.580957	1.379963	0.167598	0.372746
Chthonomonas	8.230239	-1.29526	0.944555	-1.37129	0.170285	0.372746
Nitrospirillum	123.5791	-0.51749	0.375119	-1.37954	0.167727	0.372746
Altererythrobacte	369.8429	-0.464	0.335008	-1.38504	0.16604	0.372746
Blastomonas	66.55685	-0.45304	0.32828	-1.38003	0.167578	0.372746
Aquabacterium	976.754	-0.66034	0.478858	-1.379	0.167896	0.372746
Oxalobacter	7.643576	-1.05555	0.772072	-1.36716	0.171575	0.372746
Prosthecochloris	25.13602	-0.78107	0.567701	-1.37585	0.168867	0.372746

Ralstonia	105309.4	-0.50182	0.362172	-1.38557	0.165878	0.372746
Providencia	75.3085	0.555233	0.403466	1.376155	0.168773	0.372746
Immundisolibacter	78.98035	-0.46151	0.338888	-1.36184	0.17325	0.37544
Caldilinea	16.0765	-0.80183	0.59075	-1.35731	0.174684	0.377695
Ottowia	378.2706	-0.58603	0.433141	-1.35298	0.176062	0.379819
Bernardetia	25.08347	0.964919	0.714157	1.35113	0.176654	0.380241
Kutzneria	158.8718	-0.37561	0.278968	-1.34641	0.17817	0.382647
Hartmannibacter	51.08944	-0.53236	0.3969	-1.34129	0.179825	0.384901
Azotobacter	188.164	-0.48282	0.360127	-1.34069	0.180021	0.384901
Beggiatoa	12.89407	-1.23073	0.920487	-1.33704	0.181208	0.386578
Verrucomicrobiu	81.38629	-0.66227	0.496801	-1.33307	0.182508	0.388487
Pigmentiphaga	143.9347	-0.43484	0.326565	-1.33156	0.183006	0.388685
Frischella	5.868071	-1.48192	1.114979	-1.3291	0.183816	0.389543
Chromohalobacte	29.32787	-0.53564	0.403539	-1.32735	0.184395	0.389754
Filomicrobium	13.35083	-0.88554	0.668272	-1.32512	0.185133	0.389754
Photorhabdus	37.15836	0.568857	0.429073	1.325779	0.184913	0.389754
Pseudonocardia	849.9054	-0.42417	0.320989	-1.32144	0.186355	0.391468
Echinicola	25.28042	-0.83364	0.634586	-1.31368	0.188955	0.395881
Nitrobacter	131.9366	-0.52222	0.39782	-1.31271	0.189281	0.395881
Desulfatibacillum	22.8588	-0.69062	0.527749	-1.30861	0.190667	0.39705
Stanieria	38.11665	1.169934	0.893441	1.30947	0.190375	0.39705
Arachidicoccus	79.57458	-0.41906	0.32115	-1.30487	0.191936	0.397124
Jatrophihabitans	130.0573	-0.54595	0.418339	-1.30504	0.191878	0.397124
Dechloromonas	88.3344	-0.33809	0.259103	-1.30485	0.191943	0.397124
Geodermatophilu	261.8148	-0.6241	0.478743	-1.30363	0.192361	0.397133
Ureaplasma	5.755253	2.081812	1.598911	1.302018	0.19291	0.397395
Methylomonas	48.40726	-0.57857	0.444773	-1.30083	0.193316	0.397395
Proteus	52.42165	0.71082	0.547446	1.298431	0.194139	0.398235
Neoasaia	24.61859	-0.63053	0.48715	-1.29432	0.195553	0.400006
Starkeya	88.57022	-0.46138	0.356693	-1.29351	0.195836	0.400006
Paludisphaera	75.95092	-0.41076	0.317924	-1.29202	0.19635	0.400204
Candidatus Bipol	7.068753	-1.59672	1.239664	-1.28803	0.197736	0.402175
Ndongobacter	63.83242	-0.99606	0.774841	-1.2855	0.198618	0.403115
Chlamydia	29.03196	0.563719	0.439403	1.282921	0.19952	0.404091
Campylobacter	609.3191	0.417422	0.326197	1.279665	0.200663	0.404698
Sulfuricella	38.77779	-0.6387	0.499041	-1.27985	0.200597	0.404698
Yangia	144.0293	-0.30324	0.237485	-1.27689	0.201641	0.404986
Gemmatimonas	72.98062	-0.4593	0.359711	-1.27687	0.201649	0.404986
Sulfurospirillum	44.6875	0.598389	0.470158	1.272741	0.20311	0.407068
Escherichia	611.9084	0.447707	0.353591	1.266172	0.205451	0.410903

Pandoravirus	10.73791	-0.96279	0.765374	-1.25793	0.208417	0.415967
Eikenella	87.67366	-0.61713	0.492173	-1.25389	0.209883	0.418024
Marinitoga	6.712612	1.507236	1.203828	1.252035	0.210557	0.418498
Actinotignum	209.8055	0.652932	0.522231	1.250275	0.211199	0.418907
Nakamurella	276.2023	-0.47582	0.38162	-1.24685	0.212453	0.420526
Cnuibacter	183.6917	-0.66037	0.530509	-1.24478	0.213213	0.421161
Actinomyces	10645.59	-0.48317	0.389601	-1.24018	0.214909	0.423032
Fibrobacter	8.926343	-1.10926	0.894696	-1.23982	0.215041	0.423032
Staphylococcus	429774.2	1.270435	1.026193	1.238008	0.215713	0.423486
Candidatus Symb	34.23852	-0.66055	0.534681	-1.23541	0.216677	0.42451
Parvimonas	229.0009	-0.5837	0.474016	-1.2314	0.218175	0.426573
Auraticoccus	114.9347	-0.44043	0.358386	-1.22893	0.219099	0.42751
Erythrobacter	279.6508	-0.33414	0.273276	-1.22273	0.22143	0.428099
Gallionella	24.39283	-0.62489	0.511231	-1.22233	0.221584	0.428099
Salinibacter	26.28125	-0.6639	0.543109	-1.2224	0.221557	0.428099
Colwellia	74.08489	0.527461	0.430937	1.223987	0.220957	0.428099
Gemmobacter	34.26738	-0.54597	0.446713	-1.2222	0.22163	0.428099
Cellulomonas	588.2067	-0.42808	0.350792	-1.22032	0.222344	0.428615
Pimelobacter	200.099	-0.39731	0.326604	-1.2165	0.223793	0.430545
Hoyosella	84.04082	-0.55407	0.45667	-1.21328	0.225021	0.431225
Sphingopyxis	623.7829	-0.35867	0.295631	-1.21322	0.225045	0.431225
Anabaenopsis	27.41316	-0.8298	0.685416	-1.21066	0.226027	0.431383
Pa6virus	1046.415	0.845544	0.697793	1.211741	0.225612	0.431383
Salinisphaera	29.32365	-0.48852	0.405804	-1.20384	0.228653	0.434974
Thermosynechoc	18.39869	-0.84176	0.70023	-1.20212	0.229316	0.434974
Novosphingobiun	461.5752	-0.32559	0.2709	-1.20189	0.229405	0.434974
Parabacteroides	257.5667	-0.99179	0.825748	-1.20108	0.229721	0.434974
Halorhodospira	33.38652	-0.50276	0.419514	-1.19844	0.230747	0.436058
Aeromicrobium	663.4701	-0.3882	0.324455	-1.19647	0.231513	0.436645
Coriobacterium	23.72219	-0.89608	0.750855	-1.19341	0.232707	0.437289
Dickeya	197.0842	-0.26294	0.22035	-1.19327	0.232765	0.437289
Corallococcus	89.85311	-0.49621	0.417706	-1.18794	0.234859	0.438138
Mageeibacillus	31.94118	-1.11771	0.941087	-1.18768	0.234959	0.438138
Oceanobacillus	43.35809	0.518841	0.43693	1.187468	0.235043	0.438138
Weissella	70.65298	0.560122	0.470397	1.190744	0.233754	0.438138
Microbacterium	3796.623	-0.44043	0.372868	-1.18119	0.237528	0.441057
Acidithiobacillus	43.30361	-0.47027	0.397782	-1.18223	0.237116	0.441057
Odoribacter	83.32391	-0.97022	0.823537	-1.17812	0.238751	0.442472
Dinoroseobacter	54.44958	-0.56353	0.478816	-1.17692	0.239227	0.442502
Kurthia	10.50537	-1.06813	0.910028	-1.17373	0.240501	0.444002

Pelosinus	24.57972	0.586247	0.499984	1.172533	0.240983	0.444038
Alcaligenes	109.9025	-0.31895	0.272999	-1.16831	0.242681	0.44631
Candidatus Nitrososphaera	37.98842	-0.65846	0.568795	-1.15763	0.247014	0.452675
Marinovum	45.16872	-0.51073	0.441255	-1.15746	0.247085	0.452675
Bibersteinia	7.847548	-1.17555	1.019906	-1.1526	0.249073	0.455448
Desulfallas	5.870057	-1.05314	0.919419	-1.14544	0.252026	0.459695
Prevotella	3721.933	-0.43524	0.381003	-1.14234	0.253311	0.459695
Butyrivibrio	62.18187	0.707024	0.618521	1.143089	0.253002	0.459695
Melissococcus	9.275291	1.266554	1.107575	1.143539	0.252815	0.459695
Sulfitobacter	146.8013	-0.33326	0.293227	-1.13654	0.255732	0.463212
Mariniflexile	11.24007	1.072799	0.949849	1.129441	0.258712	0.463666
Fermentimonas	10.17569	-1.29955	1.154133	-1.126	0.260166	0.463666
Sinomonas	163.2584	-0.37713	0.334352	-1.12796	0.259339	0.463666
Algibacter	7.996602	1.065372	0.939453	1.134035	0.25678	0.463666
Microcella	84.50994	-0.47461	0.422061	-1.12451	0.260798	0.463666
Oceanithermus	52.28489	-0.39003	0.345365	-1.12932	0.258762	0.463666
Brevundimonas	1765.118	-0.40132	0.356745	-1.12495	0.260608	0.463666
Nitrosomonas	152.2672	-0.59563	0.529982	-1.12388	0.261065	0.463666
Aquiflexum	9.042458	-0.97465	0.86294	-1.12946	0.258705	0.463666
Arthrospira	9.736271	-0.96431	0.858436	-1.12334	0.261295	0.463666
Limnobaculum	6.563421	-0.97328	0.859753	-1.13205	0.257613	0.463666
Halopiger	18.37543	-0.87832	0.783449	-1.1211	0.262246	0.464495
Xanthobacter	128.938	-0.39601	0.353781	-1.11937	0.262981	0.464938
Marteella	153.2839	-0.43203	0.386912	-1.11661	0.26416	0.466166
Halorhabdus	18.05047	-0.65929	0.591639	-1.11435	0.265128	0.467014
Haliangium	141.1498	-0.35848	0.323236	-1.10905	0.26741	0.468176
Polymorphum	76.53721	-0.39864	0.359081	-1.11017	0.266924	0.468176
Kineococcus	128.536	-0.45932	0.414442	-1.10829	0.267738	0.468176
Mixta	40.97447	-0.56077	0.505369	-1.10963	0.267159	0.468176
Gordonia	4991.276	-0.50974	0.462578	-1.10196	0.270479	0.468995
Solimonas	89.95242	-0.45215	0.410465	-1.10157	0.270649	0.468995
Hahella	14.50293	-0.62195	0.562521	-1.10565	0.26888	0.468995
Sanguibacter	135.2697	-0.37664	0.341741	-1.10212	0.270412	0.468995
Kyrpidia	30.67351	-0.56711	0.513467	-1.10447	0.269391	0.468995
Candidatus Aquilina	7.834318	-0.88224	0.803498	-1.098	0.272205	0.470842
Methylomicrobium	57.02666	-0.56654	0.516697	-1.09647	0.272875	0.471
Jonesia	45.76045	-0.56133	0.512377	-1.09554	0.273278	0.471
Aquaspirillum	30.63081	-0.40384	0.369853	-1.09189	0.274881	0.472914
Austwickia	66.81253	-0.48941	0.451072	-1.085	0.277924	0.473062
Haloterrigena	38.6949	-0.49487	0.455446	-1.08656	0.277232	0.473062

Isoptericola	274.6441	-0.36	0.330738	-1.08848	0.276384	0.473062
Roseibacterium	33.41435	-0.53982	0.496976	-1.0862	0.27739	0.473062
Candidatus Phaec	14.06176	-0.84366	0.77732	-1.08534	0.277771	0.473062
Methylovulum	14.80906	-1.10638	1.017237	-1.08763	0.276759	0.473062
Haemophilus	1386.94	0.479103	0.443677	1.079845	0.280211	0.476111
Cellvibrio	52.97656	-0.51945	0.482367	-1.07688	0.281534	0.476573
Tabrizicola	39.34514	-0.44504	0.413642	-1.0759	0.281972	0.476573
Piscirickettsia	8.951355	1.068564	0.991544	1.077677	0.281178	0.476573
Halopenitus	8.769877	-0.95943	0.892805	-1.07463	0.282541	0.476695
Sphingorhabdus	71.34105	-0.38594	0.360122	-1.0717	0.283853	0.478068
Nocardia	1642.144	-0.34795	0.325227	-1.06988	0.284675	0.478613
Agrococcus	269.5979	-0.41208	0.386416	-1.06641	0.286239	0.480401
Cryobacterium	257.9756	-0.34281	0.322136	-1.06419	0.287242	0.481243
Tumebacillus	34.79467	-0.40574	0.3821	-1.06188	0.288292	0.482161
Candidatus Thiog	34.22475	0.768652	0.727354	1.056778	0.290613	0.485197
Saccharothrix	150.7478	-0.4058	0.387572	-1.04703	0.295084	0.491807
Weeksella	10.83434	-1.23595	1.181915	-1.04572	0.295692	0.49182
Finegoldia	7857.462	-0.43297	0.41441	-1.0448	0.296117	0.49182
Halicomenobact	30.32501	0.567626	0.545191	1.041151	0.297806	0.493771
Methylocella	34.73078	-0.48036	0.46286	-1.0378	0.299362	0.495496
Pusillimonas	18.80486	-0.62793	0.611699	-1.02654	0.304637	0.498647
Neomicrococcus	115.0831	-0.55542	0.539402	-1.02969	0.303156	0.498647
Streptococcus	35319.43	-0.47231	0.458376	-1.03039	0.302827	0.498647
Zunongwangia	8.669293	1.068098	1.038017	1.028979	0.303489	0.498647
Pelobacter	76.13951	-0.31693	0.307864	-1.02946	0.303265	0.498647
Scytonema	32.16726	0.516316	0.503242	1.025979	0.304902	0.498647
Blautia	148.9723	-0.421	0.410205	-1.02631	0.304745	0.498647
Betapapillomavir	754.4662	-1.12054	1.094835	-1.02348	0.306082	0.498996
Actinobacillus	102.3218	-0.61399	0.600639	-1.02222	0.306675	0.498996
Geosporobacter	18.56622	-0.95058	0.929755	-1.0224	0.30659	0.498996
Pseudarcicella	11.48293	-0.82693	0.81044	-1.02035	0.307564	0.499596
Halorientalis	17.15971	-0.60578	0.594586	-1.01883	0.308282	0.499917
Eubacterium	220.0555	-0.45592	0.448135	-1.01737	0.308977	0.500199
Agromyces	303.8156	-0.37492	0.371331	-1.00966	0.312657	0.502838
Syntrophomonas	10.04712	1.238292	1.226557	1.009568	0.312702	0.502838
Stigmatella	63.58261	-0.3439	0.339624	-1.01258	0.311259	0.502838
Georgenia	132.6235	-0.35711	0.353127	-1.01127	0.311886	0.502838
Alkaliphilus	33.64461	0.619234	0.615273	1.006439	0.314205	0.504409
Aurantimicrobiun	83.56232	-0.49216	0.490045	-1.00432	0.315227	0.505205
Cronobacter	142.5909	-0.34813	0.347038	-1.00316	0.315785	0.505256

Pseudomonas	15831.4	-0.29922	0.29969	-0.99842	0.318074	0.508071
Dermacoccus	3257.387	0.572915	0.577245	0.992498	0.320954	0.510126
Shimwellia	750.2851	-1.26069	1.269447	-0.9931	0.320659	0.510126
Anaerostipes	230.4103	-0.7092	0.714174	-0.99303	0.320695	0.510126
Pelagibaca	50.4034	-0.41121	0.416205	-0.98799	0.323157	0.512778
Nitrosococcus	24.622	-0.37006	0.375405	-0.98577	0.324247	0.513355
Fibrella	52.46655	-0.50463	0.512283	-0.98507	0.32459	0.513355
Methanoculleus	20.94618	-0.4016	0.409121	-0.98162	0.326288	0.514102
Tannerella	378.8161	-0.45869	0.466951	-0.98232	0.325945	0.514102
Thalassospira	33.08575	-0.37075	0.377988	-0.98085	0.326669	0.514102
Arthrobacter	2228.952	-0.37183	0.379673	-0.97934	0.327411	0.514427
Kordia	7.183607	1.255569	1.293962	0.970329	0.331882	0.51975
Negativicoccus	258.7426	-0.56689	0.583591	-0.97139	0.331355	0.51975
Pseudarthrobacte	547.2038	-0.36482	0.376589	-0.96875	0.33267	0.520136
Pirellula	10.40979	-0.62103	0.644041	-0.96426	0.334913	0.522791
Pectobacterium	163.0272	-0.34919	0.363226	-0.96135	0.336378	0.524225
Cellulosimicrobiu	253.5076	-0.39058	0.407612	-0.9582	0.33796	0.525838
Yersinia	180.966	-0.32171	0.338545	-0.95028	0.34197	0.526553
Roseobacter	37.647	-0.52127	0.54887	-0.94971	0.342259	0.526553
Treponema	134.3863	0.255412	0.268706	0.950527	0.341845	0.526553
Macrococcus	140.7256	0.488804	0.513354	0.952178	0.341007	0.526553
Candidatus Sulcia	6.945142	1.170841	1.230281	0.951685	0.341257	0.526553
Collinsella	390.5017	-0.62272	0.652259	-0.95471	0.339724	0.526553
Parageobacillus	7.148003	-1.17138	1.227163	-0.95455	0.339807	0.526553
Azospira	147.0426	-0.43978	0.463726	-0.94836	0.342947	0.526767
Dehalogenimona:	14.10235	-0.62252	0.657524	-0.94676	0.343762	0.527175
Ruminococcus	163.0935	-0.46764	0.496927	-0.94106	0.346672	0.53079
Proteiniphilum	12.47909	-0.75612	0.81061	-0.93278	0.350934	0.536459
Thermotoga	12.01835	-0.82509	0.885652	-0.93162	0.351535	0.536524
Tepidanaerobacti	5.675524	-1.00936	1.090861	-0.92529	0.354815	0.53896
Listeria	114.893	0.2957	0.319038	0.926847	0.354006	0.53896
Alphabaculovirus	8.738047	1.016321	1.097224	0.926266	0.354308	0.53896
Desulfosporosinu	40.20555	0.464564	0.5052	0.919564	0.3578	0.542636
Xylella	25.66693	-0.41608	0.45439	-0.91569	0.35983	0.544853
Actinopolymorph	80.3425	-0.31378	0.343482	-0.91352	0.360968	0.54571
Rathayibacter	109.6523	-0.2623	0.287464	-0.91245	0.361533	0.54571
Intrasporangium	155.5045	-0.34563	0.381074	-0.907	0.364407	0.548328
Actinoalloteichus	537.4014	0.37725	0.415934	0.906994	0.36441	0.548328
Paraoerskovia	70.05303	-0.34863	0.385401	-0.9046	0.365678	0.549375
Methanocella	6.735621	-0.90588	1.005722	-0.90073	0.367733	0.550739

Acetoanaerobium	15.75858	-0.56801	0.630357	-0.9011	0.367537	0.550739
Propionimicrobiu	158.5119	-0.45057	0.501782	-0.89793	0.36922	0.552105
Leifsonia	433.1803	-0.29625	0.332597	-0.89071	0.373083	0.557013
Octadecabacter	25.90776	-0.41764	0.470665	-0.88734	0.374897	0.557986
Mycetocola	74.68093	-0.33136	0.373115	-0.88809	0.37449	0.557986
Bifidobacterium	2948.14	0.389246	0.439899	0.884854	0.376236	0.559112
Paraphotobacteri	7.910704	0.86645	0.989904	0.875287	0.381418	0.565064
Trichormus	13.21995	0.953617	1.089425	0.875339	0.381389	0.565064
Acholeplasma	36.76557	0.443849	0.509723	0.870765	0.383883	0.565893
Kangiella	18.28151	-0.5211	0.599031	-0.86991	0.384352	0.565893
Lacimicrobium	17.76524	-0.62371	0.716446	-0.87056	0.383997	0.565893
Gammaretrovirus	14.57035	1.476307	1.699136	0.868858	0.384925	0.565893
Persicobacter	8.545405	-0.6335	0.728851	-0.86917	0.384755	0.565893
Acidipropionibact	307.4582	-0.31163	0.362985	-0.85853	0.390601	0.571244
Leuconostoc	422.1705	0.426194	0.498389	0.855144	0.392472	0.571244
Cobetia	32.60278	-0.55568	0.64903	-0.85618	0.3919	0.571244
Methylobacteriur	1649.991	-0.26016	0.302446	-0.86018	0.389687	0.571244
Candidatus Proto	10.9626	-0.8198	0.959189	-0.85468	0.39273	0.571244
Zhihengliuella	108.1344	-0.33729	0.39269	-0.85891	0.39039	0.571244
Cycloclasticus	11.41057	0.896203	1.048181	0.855008	0.392547	0.571244
Geitlerinema	26.5096	-0.50044	0.586636	-0.85307	0.393619	0.57167
Zymomonas	13.42532	-0.57371	0.673433	-0.85191	0.394263	0.571741
Gallaecimonas	11.52632	-0.70825	0.832755	-0.85049	0.395055	0.572026
Veillonella	2782.758	-0.38423	0.455832	-0.84291	0.399277	0.577064
Ilyobacter	7.571755	1.039274	1.234159	0.842091	0.399737	0.577064
Gallibacterium	9.327232	-0.99529	1.184386	-0.84034	0.400717	0.57761
Deinococcus	2101.254	0.407504	0.486541	0.837553	0.402282	0.578833
Faecalibacterium	1095.896	-0.47437	0.56697	-0.83668	0.402771	0.578833
Pararhodospirillu	37.9157	-0.38872	0.465834	-0.83446	0.40402	0.579759
Halomonas	523.7645	-0.20138	0.243339	-0.82757	0.407915	0.583622
Chryseobacterium	2141.554	0.330101	0.398892	0.827546	0.407928	0.583622
Cohaesibacter	15.29227	-0.48437	0.587995	-0.82376	0.410077	0.585607
Ereboglobus	27.98436	-0.52163	0.633852	-0.82295	0.410535	0.585607
Microbulbifer	81.08462	-0.37172	0.453116	-0.82036	0.412009	0.586838
Entomoplasma	14.10536	0.738208	0.904497	0.816154	0.414412	0.587486
Megasphaera	56.8097	-0.35156	0.431283	-0.81515	0.414984	0.587486
Isosphaera	10.52665	-0.53664	0.656787	-0.81707	0.413887	0.587486
Auricoccus	34.2614	0.60262	0.737799	0.816781	0.414054	0.587486
Marmoricola	274.3748	-0.26218	0.322004	-0.81421	0.415524	0.587486
Saccharopolyspor	147.8914	-0.26094	0.32135	-0.812	0.416791	0.58841

Teredinibacter	10.42825	-0.70112	0.86859	-0.80719	0.419558	0.591447
Adlercreutzia	146.2697	-0.54868	0.681482	-0.80513	0.420744	0.59225
Roseomonas	537.1072	-0.33265	0.414621	-0.80231	0.422377	0.593677
Robiginitalea	8.890794	-0.55998	0.699992	-0.79998	0.423723	0.594699
Microclunatus	230.9628	-0.24554	0.309849	-0.79244	0.428104	0.597484
Halalkalicoccus	17.4222	-0.46653	0.588841	-0.79228	0.428197	0.597484
Lawsonella	3741.624	-0.39631	0.500184	-0.79233	0.428167	0.597484
Moorea	12.57012	0.735869	0.927952	0.793003	0.427776	0.597484
Verrucosipora	86.41396	-0.34402	0.43708	-0.78709	0.43123	0.600258
Polynucleobacter	98.80177	-0.2159	0.274421	-0.78674	0.431435	0.600258
Pseudopedobacter	39.9623	-0.58412	0.745556	-0.78347	0.433351	0.602051
Propionibacterium	2291.206	-0.37382	0.477827	-0.78234	0.434017	0.602105
Paenibacillus	677.8101	0.155933	0.199626	0.781126	0.434729	0.602221
Arsenicicoccus	203.9071	-0.29434	0.379127	-0.77636	0.437536	0.604999
Thiomicrospira	7.276666	-0.73196	0.943756	-0.77558	0.437994	0.604999
Brevibacterium	1469.835	-0.34521	0.446001	-0.77401	0.438925	0.605414
Tm4virus	6.398132	-0.9323	1.208608	-0.77138	0.440482	0.606689
Leisingera	27.13388	-0.35977	0.471579	-0.76291	0.445514	0.612742
Aneurinibacillus	8.384955	-0.7693	1.016344	-0.75693	0.449093	0.615262
Jiangella	299.5582	-0.23381	0.308214	-0.75859	0.448099	0.615262
Leptospirillum	12.04773	-0.64239	0.849015	-0.75663	0.449269	0.615262
Glaciecola	21.574	-0.49558	0.659067	-0.75194	0.45209	0.618242
Rahnella	174.9619	0.295335	0.393788	0.749985	0.453264	0.618966
Defluviimonas	101.9334	-0.37422	0.502304	-0.74501	0.456266	0.622181
Wenyinzhuangia	6.350177	0.739027	1.006207	0.734468	0.462664	0.62916
Moraxella	23004.98	0.382632	0.521001	0.734417	0.462695	0.62916
Pontibacter	66.24576	-0.22772	0.310997	-0.73222	0.464033	0.630087
Ruegeria	88.24568	-0.24698	0.338925	-0.72872	0.466174	0.631947
Chania	5.676205	-0.75556	1.038099	-0.72783	0.466719	0.631947
Nocardioides	983.8462	-0.27219	0.3747	-0.72641	0.467587	0.632231
Kytococcus	538.5978	-0.33665	0.46584	-0.72267	0.469883	0.634441
Natranaerobius	7.423102	0.994849	1.379389	0.721225	0.470771	0.634748
Asaia	10.09087	-0.50248	0.699069	-0.71878	0.472275	0.635882
Confluentimicrob	35.62079	-0.33539	0.469802	-0.7139	0.47529	0.639046
Atopobium	131.7167	-0.39357	0.553067	-0.71161	0.476708	0.63939
Mycobacteroides	1217.044	-0.3074	0.432145	-0.71133	0.476879	0.63939
Nitratifractor	7.392528	-0.73203	1.03383	-0.70807	0.478901	0.640313
Euzebya	81.26483	-0.2281	0.32204	-0.70831	0.478751	0.640313
Xenorhabdus	58.92151	0.232696	0.33034	0.704412	0.481176	0.641568
Segniliparus	88.75068	-0.35514	0.503719	-0.70504	0.480786	0.641568

Plantactinospora	183.9187	-0.23529	0.334614	-0.70316	0.481955	0.641715
Methanofollis	13.60672	-0.48463	0.698224	-0.69409	0.487625	0.648365
Sphingobium	1263.024	-0.24837	0.358946	-0.69194	0.488973	0.649259
Glaesserella	26.74016	-0.4528	0.657406	-0.68877	0.490967	0.651006
Leptotrichia	329.1814	-0.29882	0.436757	-0.68419	0.493858	0.653936
Algoriphagus	11.25202	-0.49349	0.724151	-0.68148	0.495569	0.655298
Marinilactibacillu	10.0694	-0.58546	0.861604	-0.6795	0.496819	0.656047
Candidatus Phyto	16.76813	0.717421	1.064612	0.673881	0.500387	0.659851
Nodularia	5.538512	-0.83025	1.253931	-0.66212	0.507894	0.661917
Calothrix	186.1979	0.291976	0.440866	0.662279	0.507792	0.661917
Kribbella	119.3126	-0.23018	0.345894	-0.66547	0.505749	0.661917
Enterobacter	634.0888	-0.18036	0.272569	-0.66171	0.508159	0.661917
Faecalibaculum	6.337424	-0.89056	1.332944	-0.66812	0.504058	0.661917
Glutamicibacter	426.4653	-0.23435	0.351525	-0.66666	0.504991	0.661917
Pediococcus	42.24056	0.310563	0.463812	0.669589	0.50312	0.661917
Halobacteroides	6.344781	0.86237	1.303117	0.661775	0.508116	0.661917
Luteipulveratus	142.8837	-0.22773	0.34398	-0.66203	0.507952	0.661917
Pasteurella	440.2585	-0.29146	0.444129	-0.65626	0.511659	0.665573
Natrinema	25.49342	-0.39538	0.605665	-0.6528	0.513887	0.667566
Rothia	9131.302	-0.37459	0.580298	-0.64552	0.518591	0.66915
Acidihalobacter	82.25801	-0.22572	0.34863	-0.64744	0.517348	0.66915
Brochothrix	211.4917	0.544407	0.84224	0.646379	0.518034	0.66915
Terriglobus	127.0671	-0.26157	0.404545	-0.64657	0.517911	0.66915
Janibacter	810.1264	-0.31171	0.479982	-0.64943	0.516062	0.66915
Saccharospirillum	16.50144	-0.36486	0.569085	-0.64113	0.521441	0.671923
Muricauda	12.3436	-0.50863	0.796307	-0.63873	0.522999	0.672127
Chondrocystis	20.48813	-0.45916	0.718543	-0.63901	0.522813	0.672127
Spirochaeta	31.46233	-0.23629	0.374483	-0.63097	0.528057	0.675922
Phytobacter	13.09555	-0.62994	0.997499	-0.63152	0.527702	0.675922
Methylothera	22.57596	-0.36298	0.575272	-0.63096	0.528064	0.675922
Grylloalpicola	88.04589	-0.22091	0.350909	-0.62954	0.528993	0.67621
Humibacter	228.9883	-0.32464	0.520318	-0.62392	0.532681	0.679116
Modestobacter	237.013	-0.27836	0.446084	-0.62401	0.532624	0.679116
Psychromicrobiur	62.70074	-0.38599	0.622061	-0.6205	0.53493	0.681078
Kibdelosporangiu	161.7652	-0.24823	0.401181	-0.61876	0.536076	0.681357
Thalassococcus	48.98035	-0.24914	0.40358	-0.61731	0.537028	0.681357
Citromicrobium	39.87432	-0.27499	0.445734	-0.61693	0.537279	0.681357
Sep1virus	78.94591	-1.05085	1.709352	-0.61477	0.538709	0.682269
Olsenella	339.7671	-0.26194	0.42688	-0.61363	0.539463	0.682325
Halobacteriovora	16.16218	-0.50106	0.824521	-0.6077	0.543384	0.68638

Salinispora	88.56443	-0.25344	0.419778	-0.60376	0.546005	0.686978
Halioglobus	29.96591	-0.32456	0.536651	-0.60478	0.545323	0.686978
Alteromonas	82.57957	0.197698	0.326641	0.605247	0.545015	0.686978
Crinalium	12.63505	0.590119	0.981253	0.601394	0.547578	0.688056
Thioclava	50.33392	-0.29043	0.490568	-0.59202	0.553835	0.695009
Belliella	9.648409	-0.58475	0.990545	-0.59034	0.554966	0.695518
Mobiluncus	437.5561	-0.34485	0.587914	-0.58657	0.557496	0.697778
Draconibacterium	9.365857	0.526685	0.909285	0.579231	0.562434	0.703042
Pseudopropionib:	273.6351	-0.26779	0.465794	-0.57492	0.565345	0.705762
Sphingomonas	2155.901	-0.17745	0.312944	-0.56702	0.570698	0.711519
Jeotgalicoccus	11.02021	-0.47896	0.872261	-0.5491	0.582937	0.71978
Actinosynnema	218.2281	-0.19776	0.359289	-0.55042	0.58203	0.71978
Desulfobacterium	7.418919	-0.59837	1.088569	-0.54968	0.582538	0.71978
Idiomarina	24.91039	-0.36302	0.658944	-0.55091	0.581693	0.71978
Clavibacter	397.5848	-0.20542	0.373844	-0.54949	0.582668	0.71978
Flammeovirga	18.98843	0.550634	0.993414	0.554284	0.579384	0.71978
Meiothermus	71.23934	-0.24797	0.45205	-0.54854	0.583322	0.71978
Miniiomonas	139.4614	-0.22453	0.407138	-0.55148	0.581302	0.71978
Flavivirga	8.205913	0.60049	1.101383	0.545215	0.585606	0.721671
Chroococciopsis:	10.7473	-0.61229	1.131567	-0.5411	0.588437	0.72423
Methanococcoides	8.473109	-0.50936	0.943925	-0.53962	0.589459	0.724559
Molluscipoxvirus	1745.656	-1.54452	2.885459	-0.53528	0.592458	0.727314
Desulfobacca	8.278969	-0.4578	0.865982	-0.52864	0.597052	0.732018
Anaerococcus	2616.476	-0.21002	0.404675	-0.519	0.603763	0.739302
Erwinia	301.2503	-0.22788	0.444417	-0.51276	0.608118	0.740996
Allokutzneria	149.7368	-0.18198	0.355018	-0.5126	0.608234	0.740996
Oscillibacter	177.5452	-0.35235	0.684596	-0.51469	0.606771	0.740996
Pseudoclostridium	6.631289	0.657312	1.28102	0.513116	0.60787	0.740996
Turcibacter	12.69701	0.584642	1.144287	0.510922	0.609406	0.741482
Tetragenococcus	45.30757	0.310957	0.611881	0.508198	0.611314	0.742863
Ezakiella	864.1796	-0.27554	0.546593	-0.50411	0.614185	0.745407
Rhodococcus	6728.821	-0.21444	0.429217	-0.49962	0.617344	0.746411
Fastidiosipila	167.8877	0.285927	0.571772	0.500073	0.617024	0.746411
Methylophaga	7.013605	-0.47024	0.938854	-0.50087	0.616465	0.746411
Psychrobacter	580.6341	0.264958	0.534085	0.496098	0.619825	0.748468
Klebsiella	1059.336	0.202264	0.411714	0.491273	0.623233	0.749755
Murdochiella	168.2988	-0.34534	0.702839	-0.49135	0.623177	0.749755
Dehalococcoides	20.38504	-0.44084	0.896403	-0.49178	0.622872	0.749755
Alkalitalea	10.32683	0.549704	1.125875	0.488246	0.625375	0.75045
P68virus	13.06186	-0.72329	1.479289	-0.48894	0.624882	0.75045

Exiguobacterium	233.8615	0.279164	0.573552	0.486728	0.626451	0.750803
Acidaminococcus	31.64573	0.308593	0.645186	0.478301	0.632436	0.756155
Gramella	55.86711	0.147152	0.308419	0.477115	0.63328	0.756155
Hafnia	24.99889	-0.30041	0.628538	-0.47795	0.632689	0.756155
Candidatus Fukat	12.2009	-0.47438	1.000333	-0.47422	0.635342	0.757675
Enterococcus	460.5717	0.149689	0.32406	0.461918	0.64414	0.767214
Renibacterium	65.75292	-0.22762	0.497046	-0.45795	0.646988	0.769651
Halostagnicola	10.61844	-0.47846	1.049402	-0.45594	0.648435	0.769736
Biseptimavirus	43.62423	1.129679	2.47943	0.455621	0.648663	0.769736
Tessaracoccus	1155.667	0.207571	0.457131	0.454074	0.649776	0.770105
Kingella	16.58097	-0.38876	0.858309	-0.45294	0.650594	0.770124
Natrialba	7.106001	-0.39704	0.885059	-0.4486	0.65372	0.772871
Lactobacillus	2203.113	0.155599	0.354456	0.438979	0.660676	0.780135
Acetobacterium	15.81532	-0.32713	0.750746	-0.43573	0.66303	0.781952
Catenulispora	114.5841	-0.17888	0.415685	-0.43032	0.666965	0.785627
Candidatus Plank	88.33599	-0.18579	0.44165	-0.42068	0.673987	0.792926
Labrenzia	73.37176	-0.1706	0.409966	-0.41613	0.677312	0.795862
Leptolyngbya	43.34417	-0.12104	0.296056	-0.40885	0.682652	0.801156
Antarctobacter	18.88443	-0.20579	0.511192	-0.40258	0.687258	0.805577
Thiohalobacter	34.17658	-0.17306	0.43832	-0.39483	0.692971	0.810295
Desulfotomaculum	29.49225	-0.17082	0.431491	-0.39588	0.692194	0.810295
Salegentibacter	16.45196	0.232511	0.604223	0.38481	0.700379	0.81796
Chloracidobacteri	13.18805	-0.29873	0.778656	-0.38365	0.701237	0.817968
Filifactor	76.38004	-0.21662	0.573736	-0.37756	0.70576	0.818618
Alphapolyomavir	118.7539	-0.78293	2.059822	-0.3801	0.703874	0.818618
Cyclobacterium	25.13699	0.207324	0.549703	0.377156	0.706058	0.818618
Desulfurispirillum	8.196643	-0.37918	0.995646	-0.38083	0.703327	0.818618
Friedmanniella	424.2821	-0.12814	0.339481	-0.37744	0.705843	0.818618
Muribaculum	15.04121	-0.34684	0.927038	-0.37414	0.7083	0.820227
Salinigranum	15.32474	-0.18537	0.498619	-0.37177	0.710062	0.820288
Morganella	14.72113	-0.27698	0.74425	-0.37215	0.709778	0.820288
Sphingobacterium	199.9506	0.125864	0.341518	0.368541	0.71247	0.821093
Gammapapilloma	210.4195	-0.41389	1.122741	-0.36864	0.712397	0.821093
Stenotrophomon	3024.641	-0.15447	0.421539	-0.36645	0.714026	0.821901
Pantoea	554.3169	0.119326	0.327668	0.364168	0.715732	0.822878
Mucilagibacter	197.7755	0.117957	0.331535	0.35579	0.721998	0.829088
Corynebacterium	294379.3	-0.13213	0.372857	-0.35438	0.723055	0.82931
Ignavibacterium	7.368368	-0.33968	0.972929	-0.34913	0.726994	0.831424
Snodgrassella	27.49234	0.257444	0.738809	0.348458	0.727496	0.831424
Phoenicibacter	8.152893	0.359413	1.029797	0.349013	0.727079	0.831424

L5virus	6.833465	-0.32126	0.939038	-0.34212	0.732264	0.835878
Chlorobium	25.84226	-0.15063	0.442326	-0.34055	0.733442	0.836228
Serinicoccus	181.2867	-0.13701	0.404917	-0.33836	0.735089	0.837113
Phycococcus	192.6474	-0.13862	0.411584	-0.33679	0.736272	0.837466
Marivivens	5.90437	0.421129	1.259896	0.334257	0.738186	0.838649
Chryseolinea	59.37665	-0.15303	0.469086	-0.32623	0.744251	0.84454
Shinella	180.0277	-0.12101	0.373622	-0.32388	0.746026	0.844557
Microcystis	12.88276	-0.21586	0.664655	-0.32478	0.74535	0.844557
Psychromonas	21.70296	0.211152	0.6645	0.317761	0.750666	0.846815
Alphapapillomavi	39.19101	0.456153	1.43308	0.318303	0.750255	0.846815
Arenibacter	5.715612	-0.31352	0.981801	-0.31934	0.749472	0.846815
Blastococcus	167.8706	0.116628	0.368913	0.316139	0.751897	0.847208
Roseovarius	31.67813	-0.20231	0.643159	-0.31456	0.753096	0.847564
Lelliottia	141.1207	0.164792	0.527686	0.312291	0.754819	0.848485
Gottschalkia	30.95062	0.232761	0.74805	0.311157	0.755682	0.848485
Brevibacillus	61.80745	0.09217	0.298519	0.308756	0.757507	0.848684
Cellulosilyticum	13.05912	0.26978	0.874212	0.308598	0.757627	0.848684
Pedobacter	172.8255	-0.09795	0.324629	-0.30172	0.762868	0.853558
Taylorella	10.76885	-0.28824	0.96688	-0.29811	0.76562	0.854645
Brachybacterium	2207.381	-0.14491	0.485665	-0.29838	0.765413	0.854645
Micrococcus	48492.58	-0.16479	0.55658	-0.29608	0.767166	0.855377
Christensenella	79.0214	-0.13776	0.471051	-0.29244	0.769949	0.857483
Capnocytophaga	815.5575	0.098173	0.343396	0.285887	0.774964	0.861571
Monoglobus	16.7079	0.34351	1.204027	0.285301	0.775413	0.861571
Leclercia	127.728	0.164602	0.600707	0.274014	0.784074	0.870186
Fusobacterium	734.3253	0.080611	0.298978	0.269623	0.78745	0.872924
Salinimonas	11.04942	-0.24467	0.920126	-0.26591	0.790309	0.875083
Rhodoluna	41.85134	0.155931	0.599548	0.26008	0.794802	0.879044
Akkermansia	93.33959	-0.14313	0.56379	-0.25386	0.799601	0.879361
Barnesiella	42.16963	0.171734	0.676475	0.253867	0.799598	0.879361
Cytophaga	19.47716	0.187933	0.731175	0.257029	0.797157	0.879361
Acinetobacter	4649.62	0.099933	0.393784	0.253776	0.799669	0.879361
Erysipelothrix	66.74323	-0.14281	0.560328	-0.25487	0.798823	0.879361
Cohnella	25.80082	-0.14808	0.591226	-0.25045	0.802236	0.881174
Intestinimonas	50.27408	-0.20614	0.859722	-0.23978	0.810502	0.888221
Riemerella	18.06455	-0.17441	0.725041	-0.24055	0.8099	0.888221
Novibacillus	6.579413	0.281534	1.186024	0.237377	0.812365	0.888877
Shewanella	359.9426	0.071389	0.301706	0.236619	0.812952	0.888877
Cloacibacterium	67.01921	0.08806	0.375715	0.234381	0.814689	0.889763
Cryptobacterium	23.6838	-0.2124	0.940873	-0.22575	0.821395	0.894036

Streptobacillus	14.08066	-0.19076	0.837703	-0.22772	0.819866	0.894036
Jannaschia	16.29609	0.160488	0.708206	0.226612	0.820726	0.894036
Dialister	71.28216	0.137492	0.619758	0.221848	0.824432	0.896325
Mogibacterium	193.5118	0.093275	0.440865	0.211573	0.83244	0.902986
Buttiauxella	11.50891	-0.23969	1.130681	-0.21199	0.832118	0.902986
Anaerotignum	7.365365	-0.22891	1.089816	-0.21005	0.833631	0.903258
Ornithobacterium	48.38132	-0.2211	1.07283	-0.20609	0.836723	0.905586
Microterricola	194.9217	-0.07454	0.364533	-0.20449	0.83797	0.905914
Faecalitalea	88.18678	-0.17738	0.877267	-0.2022	0.839763	0.906831
Sodalis	41.37469	0.065857	0.32819	0.200667	0.840959	0.907101
Marivirga	8.825377	-0.17559	0.886863	-0.19799	0.843053	0.90834
Herbinix	11.02209	0.204297	1.06208	0.192356	0.847464	0.912069
Lachnoanaerobac	43.57429	-0.11067	0.587693	-0.18831	0.850634	0.913432
Salmonella	301.5728	0.065847	0.349203	0.188563	0.850436	0.913432
Geobacillus	92.1644	-0.05031	0.272806	-0.18441	0.85369	0.91569
Sextaevirus	287.8146	0.268872	1.474042	0.182405	0.855265	0.916356
Halomiconema	9.179456	0.180506	1.008861	0.178921	0.858	0.918261
Ruminiclostridium	5.725996	0.199628	1.142672	0.174703	0.861313	0.92078
Rhizorhabdus	103.2171	-0.08497	0.496824	-0.17104	0.864196	0.922332
Paracoccus	5125.444	-0.08272	0.485433	-0.17041	0.864686	0.922332
Candidatus Azob	7.148957	0.191551	1.141659	0.167783	0.866754	0.922838
Actinopolyspora	99.74314	-0.07062	0.421931	-0.16736	0.867083	0.922838
Anoxybacillus	54.62685	-0.06652	0.401497	-0.16569	0.8684	0.923216
Sphaerochaeta	13.33856	-0.09176	0.591021	-0.15526	0.876617	0.930921
Desulfitobacteriu	37.41351	0.073401	0.485211	0.151277	0.879757	0.932804
Gillisia	5.661673	0.172511	1.145907	0.150546	0.880334	0.932804
Aerococcus	273.3131	-0.05318	0.365258	-0.14558	0.884251	0.935922
Alloactinosynnerr	123.4809	-0.05927	0.414607	-0.14295	0.886328	0.937087
Parascardovia	84.30919	-0.07856	0.555528	-0.14141	0.887548	0.937336
Petrimonas	13.9172	0.11361	0.810445	0.140182	0.888516	0.937336
Mordavella	22.50616	-0.14703	1.082366	-0.13584	0.891948	0.939924
Lachnoclostridium	311.2429	-0.06804	0.506291	-0.13439	0.893094	0.940099
Nonlabens	54.65511	-0.04203	0.326122	-0.12888	0.897451	0.942618
Curtobacterium	587.4296	0.060294	0.465022	0.129657	0.896837	0.942618
Fervidobacterium	5.80828	0.132385	1.066399	0.124142	0.901203	0.945524
Hymenobacter	508.4689	0.043689	0.363464	0.120203	0.904323	0.947762
Runella	40.38872	0.037248	0.320376	0.116263	0.907444	0.949996
Seonamhaecicola	10.08098	0.109999	0.957617	0.114868	0.90855	0.950118
Moritella	19.80048	-0.09883	0.888361	-0.11125	0.911416	0.952077
Lysinimonas	140.6076	0.048328	0.441011	0.109585	0.912739	0.952423

Thermococcus	49.11227	0.025849	0.239888	0.107755	0.91419	0.952902
Megamonas	8.542522	-0.10062	0.973786	-0.10333	0.9177	0.955523
Serratia	976.2495	-0.03919	0.396958	-0.09873	0.921353	0.958287
Coxiella	16.25107	0.06173	0.659765	0.093564	0.925456	0.959937
Scardovia	18.22912	-0.08486	0.912259	-0.09302	0.925888	0.959937
Edwardsiella	67.18008	-0.02679	0.288227	-0.09296	0.925939	0.959937
Cutibacterium	543142.7	0.08156	0.9501	0.085844	0.931591	0.964178
Microvirgula	67.83889	-0.03984	0.467186	-0.08528	0.932039	0.964178
Solibacillus	28.12367	0.041633	0.502904	0.082786	0.934022	0.96519
Xanthomonas	1716.342	-0.02622	0.334165	-0.07845	0.937471	0.967712
Photobacterium	51.11582	0.036632	0.476311	0.076907	0.938698	0.967937
Gemella	274.6567	0.035251	0.478331	0.073695	0.941253	0.968673
Fictibacillus	14.88886	-0.04647	0.632503	-0.07347	0.941429	0.968673
Roseburia	126.5463	-0.0599	0.847176	-0.07071	0.943629	0.969897
Raoultella	119.2911	-0.02446	0.376771	-0.06492	0.948236	0.970939
Paludibacter	8.683974	0.055581	0.899152	0.061814	0.950711	0.970939
Gluconobacter	40.21495	-0.03159	0.502501	-0.06286	0.949879	0.970939
Zobellia	8.63567	-0.07398	1.168496	-0.06331	0.94952	0.970939
Halocynthiibacter	7.021786	0.064925	0.967157	0.06713	0.946478	0.970939
Sulfurovum	7.240974	-0.07321	1.102263	-0.06642	0.947047	0.970939
Lactococcus	1835.985	-0.02953	0.520516	-0.05672	0.954765	0.974043
Dehalobacterium	7.142204	-0.06001	1.129791	-0.05311	0.957642	0.975941
Oleispira	5.66908	-0.05727	1.255843	-0.0456	0.963628	0.981
Halohasta	7.121839	-0.05619	1.273591	-0.04412	0.964809	0.981162
Sk1virus	134.2668	-0.04463	1.134425	-0.03934	0.96862	0.982954
Citrobacter	242.9684	-0.01116	0.278163	-0.04011	0.968005	0.982954
Thermodesulfobium	8.934138	-0.03278	1.05081	-0.03119	0.975115	0.988221
Candidatus Hamil	5.984679	-0.04664	1.541798	-0.03025	0.975868	0.988221
Vagococcus	23.48341	0.009934	0.374488	0.026526	0.978838	0.990183
Salinibacterium	74.72791	-0.01031	0.430995	-0.02392	0.980919	0.991244
Ornithinimicrobiu	203.9469	-0.00688	0.3769	-0.01827	0.985426	0.993636
Simonsiella	20.87036	0.017377	1.039255	0.016721	0.986659	0.993636
Leminorella	14.01301	0.013207	0.898298	0.014702	0.98827	0.993636
Kocuria	5240.436	0.006116	0.441098	0.013865	0.988938	0.993636
Aeribacillus	5.756274	0.022148	1.278965	0.017317	0.986184	0.993636
Paeniclostridium	30.18852	0.008735	0.663487	0.013165	0.989496	0.993636
Peptoniphilus	122.5153	-0.00156	0.582951	-0.00267	0.997871	0.998952
Dermatophilus	63.06573	-0.00165	0.492754	-0.00334	0.997336	0.998952
Selenomonas	325.1897	-0.0011	0.420815	-0.00262	0.997911	0.998952
Histophilus	10.27419	0.000498	0.779429	0.000639	0.99949	0.99949

Desulfotalea	2.611218	-2.21453	1.359795	-1.62858	0.103403	NA
Siansivirga	3.580563	-0.91679	1.314442	-0.69747	0.485508	NA
Flagellimonas	0.645972	-0.58839	2.83367	-0.20764	0.835509	NA
Salinicoccus	4.061659	0.129068	1.339403	0.096362	0.923233	NA
Croceibacter	3.621466	0.098628	1.315044	0.075	0.940215	NA
Dichelobacter	3.132802	-0.75804	1.18705	-0.6386	0.523086	NA
Ketobacter	3.81681	-1.90244	1.092272	-1.74173	0.081556	NA
Candidatus Punic	3.327694	-1.57498	1.210731	-1.30085	0.193311	NA
Desulfomonile	2.513746	-1.34245	1.256377	-1.06851	0.285289	NA
Rummeliibacillus	4.872283	-1.72578	1.23344	-1.39916	0.161765	NA
Thermodesulfovii	4.895903	-1.94979	1.188247	-1.6409	0.100819	NA
Cylindrospermum	2.885639	-0.31975	1.399797	-0.22843	0.819315	NA
Endomicrobium	0.417085	-0.22422	2.93411	-0.07642	0.939087	NA
Thermincola	4.149451	-0.77139	1.235582	-0.62431	0.532425	NA
Paenisporosarcina	4.307222	-0.43294	1.247179	-0.34714	0.728487	NA
Sedimentisphaera	4.837113	-1.01498	1.04081	-0.97518	0.329471	NA
Oleiphilus	4.250232	-2.82849	1.039074	-2.72213	0.006486	NA
Thermacetogenium	5.33496	-0.84704	1.269179	-0.66739	0.504522	NA
Candidatus Methan	0.826114	-0.89683	2.733641	-0.32807	0.742858	NA
Desulfocapsa	0.994337	-0.3666	2.161217	-0.16963	0.865304	NA
Aureitalea	2.181744	-0.90027	1.483632	-0.6068	0.543981	NA
Methylacidiphilum	0.844368	-0.53543	2.209687	-0.24231	0.808538	NA
Carboxydocella	3.148266	-0.38371	1.326537	-0.28925	0.772387	NA
Chamaesiphon	1.686086	-0.22117	2.055974	-0.10757	0.914335	NA
Coraliomargarita	1.323245	-1.07371	2.531103	-0.42421	0.671415	NA
Cyanobacterium	4.931494	0.201095	1.272077	0.158084	0.87439	NA
Dictyoglomus	5.151687	-0.16576	1.040288	-0.15934	0.8734	NA
Paraliobacillus	4.662725	-0.0821	1.207282	-0.06801	0.94578	NA
Desulfofarcimen	3.644227	0.607124	1.225073	0.495582	0.620189	NA
Thermoclostridium	3.585443	-0.05291	1.398885	-0.03782	0.969829	NA
Lmd1virus	2.830689	1.956676	2.539755	0.770419	0.441051	NA
Halothece	4.972815	-0.13693	1.268765	-0.10793	0.914055	NA
Planctopirus	3.78307	-1.31094	1.118814	-1.17173	0.241307	NA
Candidatus Endom	2.971932	2.077706	1.829685	1.135553	0.256144	NA
Mahella	4.298156	-1.48732	1.480857	-1.00436	0.315203	NA
Acidilobus	1.595189	-2.85097	1.754158	-1.62526	0.104107	NA
Agarivorans	2.205438	-0.87527	1.491249	-0.58694	0.557244	NA
Gloeomargarita	5.373066	0.377311	1.262561	0.298846	0.765057	NA
Terribacillus	5.190434	-0.48831	1.179182	-0.41411	0.678792	NA
Methanomassiliic	1.565467	0.781253	1.902448	0.410657	0.681324	NA

Melioribacter	1.786114	-0.88032	1.607553	-0.54762	0.583956	NA
Methanohalophil	2.608096	-0.58062	1.298872	-0.44702	0.654861	NA
Candidatus Atelococcoides	3.075229	1.035048	1.724447	0.60022	0.548359	NA
Agarilytica	4.825281	1.002669	1.627649	0.616022	0.53788	NA
Thermovibrio	1.181055	-0.8181	2.126752	-0.38467	0.700482	NA
Amphibacillus	3.70092	-1.08335	1.309776	-0.82712	0.408167	NA
Wigglesworthia	3.923184	1.919854	1.482544	1.294972	0.19533	NA
Oblitimonas	3.524699	-1.0742	1.170779	-0.91751	0.358876	NA
Halodesulfurarchaeum	4.916714	-0.25809	1.273575	-0.20265	0.839407	NA
Haemospirillum	2.558847	-1.54177	1.37724	-1.11946	0.262943	NA
Paraglaciecola	2.856745	-1.01759	1.717243	-0.59257	0.553468	NA
Parachlamydia	1.363381	-0.58868	2.106818	-0.27942	0.779926	NA
Candidatus Desulfosphaerium	1.524333	0.749205	2.483396	0.301685	0.762892	NA
Natronobacterium	3.108549	-1.90161	1.440649	-1.31997	0.186845	NA
Thermanaeromonas	2.046366	-1.64098	2.019566	-0.81254	0.416481	NA
Calditerrivibrio	1.636352	1.618683	2.03935	0.793725	0.427356	NA
Pleurocapsa	1.643127	-1.43892	1.758207	-0.8184	0.413129	NA
Hippea	0.257865	-0.33681	2.938557	-0.11462	0.908749	NA
Hydrogenobaculum	2.456086	-0.7844	1.89565	-0.41379	0.679028	NA
Denitrovibrio	1.009245	-0.82955	1.800105	-0.46083	0.644919	NA
Pragia	2.370053	-1.94907	1.373525	-1.41903	0.15589	NA
Nitrosopumilus	3.649158	1.094559	1.524571	0.717945	0.472791	NA
Thalassotalea	1.194545	-0.95815	1.940334	-0.49381	0.621444	NA
Kayvirus	4.52068	-0.62993	2.900921	-0.21715	0.828092	NA
Ammonifex	4.911501	-0.97427	1.118571	-0.87099	0.383759	NA
Sfi21dt1virus	1.637426	-2.15298	2.920828	-0.73711	0.461054	NA
Catenovulum	1.282561	0.196026	1.918088	0.102199	0.918599	NA
Candidatus Cyclopropanol	3.685985	-0.57538	1.237177	-0.46507	0.641878	NA
Magnetococcus	2.446447	-2.26536	1.7094	-1.32524	0.185092	NA
Basilea	5.133195	-0.28426	1.366503	-0.20802	0.835213	NA
Pseudohongiella	2.902304	-2.98745	1.463412	-2.04143	0.041208	NA
Parapoxvirus	1.704017	-2.92874	2.877159	-1.01793	0.308712	NA
Thermoproteus	4.798012	0.116242	1.205312	0.096441	0.92317	NA
Halothermothrix	4.665893	1.633116	1.40471	1.1626	0.244992	NA
Thermocrinis	2.585131	-1.81828	1.706193	-1.0657	0.286561	NA
Candidatus Babel	1.857017	3.445747	2.115426	1.628867	0.103341	NA
Thermosulfidibaculum	1.858818	-1.27568	1.735512	-0.73505	0.462311	NA
Hydromonas	5.136116	-0.26195	1.1266	-0.23251	0.816141	NA
Candidatus Paracoccus	0.758415	0.569212	2.443197	0.232979	0.815778	NA
Simkania	0.476166	0.240925	2.933749	0.082122	0.93455	NA

Saprosira	1.083494	-1.13306	2.143336	-0.52864	0.597054	NA
Oligella	5.083567	-1.07627	1.018473	-1.05674	0.290628	NA
Tamlana	2.762415	2.549008	2.11805	1.20347	0.228795	NA
Sulfurihydrogenit	4.426557	-0.02991	1.270094	-0.02355	0.981213	NA
Planktothrix	3.847081	-1.69403	1.489746	-1.13713	0.255485	NA
Desulfobacula	2.319451	-1.06372	1.268059	-0.83886	0.401548	NA
Solendovirus	1.452513	0.315152	2.515631	0.125278	0.900304	NA
Wizardvirus	1.372713	0.891227	2.276272	0.391529	0.695406	NA
Defluviitoga	1.516111	2.438297	2.197059	1.109801	0.267085	NA
Salinispira	1.968419	-1.69725	1.579627	-1.07446	0.282615	NA
Commensalibacte	2.243253	-0.39988	1.758836	-0.22736	0.820146	NA
Methanoregula	2.235204	-1.01328	1.276301	-0.79392	0.427241	NA
Acetohalobium	2.98098	0.260505	1.497023	0.174016	0.861853	NA
Psychroflexus	2.940878	0.047627	1.417476	0.0336	0.973196	NA
Lit1virus	1.698766	-2.92936	2.326829	-1.25895	0.208049	NA
Raphidiopsis	1.049961	-1.66214	2.390752	-0.69524	0.486906	NA
Saccharophagus	4.175013	-3.11082	1.360285	-2.28689	0.022203	NA
Oenococcus	3.901926	0.10544	1.124451	0.093771	0.925291	NA
Congregibacter	3.965501	-1.57191	1.491435	-1.05396	0.291903	NA
Endozoicomonas	4.15818	-2.77069	1.279101	-2.16612	0.030302	NA
Chloroherpeton	2.512989	-0.48613	1.520235	-0.31977	0.749141	NA
Zhongshania	4.443025	-0.87042	1.073336	-0.81095	0.417393	NA
Neorickettsia	1.154605	-0.24678	2.128899	-0.11592	0.907716	NA
Deltapolyomaviru	4.210992	1.192614	2.900304	0.411203	0.680924	NA
Halanaeroarchaei	4.857746	-1.64278	1.00746	-1.63062	0.102971	NA
Gilvibacter	1.387162	-1.99666	1.632719	-1.22291	0.221365	NA
Orientia	4.273248	3.62009	1.87117	1.934666	0.053031	NA
Bacteriovorax	3.459514	-1.39538	1.365524	-1.02186	0.306846	NA
Candidatus Profft	1.431663	-2.68531	1.973716	-1.36053	0.173661	NA
Hydrogenovibrio	0.63812	-0.312	2.541549	-0.12276	0.902299	NA
Nitrososphaera	0.196212	-0.03114	2.941412	-0.01059	0.991552	NA
Aequorivita	2.760397	0.618717	1.606852	0.385049	0.700201	NA
Lawsonia	3.910299	-1.06136	1.256995	-0.84436	0.398467	NA
Tatlockia	0.612046	-1.47423	2.435679	-0.60527	0.545002	NA
Spongiibacter	2.005018	-1.66827	1.488842	-1.12052	0.262493	NA
Gloeocapsa	3.60652	-0.64549	1.323433	-0.48774	0.625735	NA
Basfia	4.983455	-2.10282	1.578561	-1.33211	0.182824	NA
Pyrococcus	2.614694	0.187292	1.602976	0.11684	0.906987	NA
Grimontia	2.900798	-1.92496	1.348015	-1.428	0.153292	NA
Wolinella	1.258121	-0.63316	2.103251	-0.30104	0.763384	NA

Methanothermok	0.934738	2.233904	2.895538	0.771499	0.440411	NA
Pseudothermotoq	3.002305	-0.64285	1.309041	-0.49108	0.623369	NA
Carboxydothermi	1.20622	-0.93421	1.929477	-0.48418	0.628261	NA
Desulfurobacteri	2.817621	-1.85636	1.440599	-1.2886	0.197537	NA
Synechocystis	4.424027	-0.40069	1.089879	-0.36765	0.713137	NA
Candidatus Nucle	1.845164	-3.05958	1.898938	-1.61121	0.107134	NA
Jeotgalibacillus	4.462848	-0.89505	1.089305	-0.82167	0.411266	NA
Candidatus Izima	4.358608	-0.15751	1.194858	-0.13182	0.895126	NA
Methanothrix	4.742449	-1.49386	1.140488	-1.30985	0.190248	NA
Flexistipes	1.739196	-1.15682	1.894659	-0.61057	0.541486	NA
Desulfohalobium	2.991325	-0.54897	1.30758	-0.41983	0.674607	NA
Reinekea	4.298798	-1.50135	1.21841	-1.23222	0.217866	NA
Candidatus Hoagl	0.724128	2.162588	2.931862	0.737616	0.460748	NA
Caldanaerobacter	1.649431	-0.44676	1.907636	-0.2342	0.814833	NA
Candidatus Nitro	4.561572	0.855682	1.42139	0.602004	0.547172	NA
Candidatus Cardii	4.565864	0.063609	1.447725	0.043937	0.964954	NA
Acetomicrobium	0.651316	0.12473	2.262397	0.055132	0.956033	NA
Dactylococcopsis	1.57836	-2.00956	2.07007	-0.97077	0.331663	NA
Thermodesulfoba	3.408609	-0.56863	1.509413	-0.37673	0.706378	NA
Gyнуella	4.176185	-1.76911	1.200058	-1.47419	0.140431	NA
Desulfurella	4.763829	1.442353	1.620528	0.890051	0.373438	NA
Ichthyobacterium	1.427874	0.081119	2.112167	0.038406	0.969364	NA
Salinivirga	3.792853	-2.09376	1.261455	-1.6598	0.096955	NA
Candidatus Ruthi	1.035186	-2.22459	2.495553	-0.89142	0.372704	NA
Rhodopirellula	5.193066	-2.05106	0.925595	-2.21593	0.026696	NA
Avibacterium	2.945168	-2.36155	1.404194	-1.68179	0.09261	NA
Thermofilum	1.249172	-2.06125	1.948704	-1.05776	0.290167	NA
Paenalcaligenes	3.050735	-0.85583	1.219297	-0.7019	0.48274	NA
Hirschia	1.13381	-2.37041	1.800435	-1.31658	0.18798	NA
Euzebyella	3.963459	-2.01659	1.268799	-1.58937	0.111978	NA
Dehalobacter	4.844935	-1.46874	1.21543	-1.20841	0.226888	NA
Methanocorpusci	0.689023	-1.63305	2.92807	-0.55772	0.577034	NA
Owenweeksia	3.448505	-1.36175	1.285713	-1.05914	0.289538	NA
Laceyella	4.151092	-2.02395	1.366132	-1.48152	0.138469	NA
Fluoribacter	3.115192	-3.10114	1.674	-1.85253	0.06395	NA
Lonsdalea	4.389266	-0.36159	1.244251	-0.29061	0.771353	NA
Syntrophobotulus	2.307995	-2.24865	1.988369	-1.1309	0.258097	NA
Sphaerospermop	4.846578	1.765513	1.401364	1.259853	0.207722	NA
Candidatus Kuene	1.528945	-1.20697	1.912059	-0.63124	0.527885	NA
Thermobaculum	4.821718	-1.78723	1.068958	-1.67194	0.094537	NA

Parvularcula	5.172922	-3.12849	1.015269	-3.08144	0.00206	NA
Syntrophus	3.935811	-0.97585	1.162479	-0.83945	0.401215	NA
Metakosakonia	0.541399	-0.01106	2.931421	-0.00377	0.996991	NA
Thioploca	3.790406	1.817136	1.695309	1.071861	0.283782	NA
Caldisphaera	1.704541	4.765525	2.327063	2.047871	0.040573	NA
Kosmotoga	0.93418	-0.43175	2.172654	-0.19872	0.842482	NA
Desulfobacter	2.256403	-1.32813	1.276044	-1.04082	0.29796	NA
Arcticibacterium	4.351829	-0.22112	1.151083	-0.1921	0.847666	NA
Caldithrix	2.985447	-1.80473	1.254675	-1.4384	0.15032	NA
Sediminicola	4.707105	-1.59821	1.251326	-1.27721	0.201527	NA
Pseudanabaena	5.050413	-1.26639	0.956425	-1.32409	0.185473	NA
Sediminispirocha	1.849669	-0.31129	1.604927	-0.19396	0.846206	NA
Brevefilum	2.000186	-0.37049	1.880108	-0.19706	0.84378	NA
Obesumbacteriur	4.764622	0.3432	1.420224	0.241652	0.80905	NA
Pajaroellobacter	1.542387	-2.79927	1.921348	-1.45693	0.145136	NA
Salimicrobium	0.662108	-0.24424	2.828849	-0.08634	0.931196	NA
Syntrophotherm	1.592439	-1.52292	1.885653	-0.80764	0.4193	NA

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Table S3A: DESeq2 results comparing healthy appearing skin versus lymphoma-affected skin before removal of reads mapping to *homo sapiens* additional

		baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
More abundant in lesions	<i>Staphylococcus argenteus</i>	306.9312	2.798081	0.7019	3.98644	6.71E-05	0.02034
More abundant in controls	<i>Streptomyces</i> sp. SM17	11.13063	-23.3284	1.95449	-11.9358	7.70E-33	2.80E-29
	<i>Bordetella pertussis</i>	175.7464	-27.0922	2.535417	-10.6855	1.19E-26	2.17E-23
	<i>Streptomyces</i> sp. PVA 94-07	13.5985	-23.6034	2.506801	-9.41573	4.70E-21	5.70E-18
	<i>Methylobacterium oryzae</i>	5.936652	-22.4632	2.409511	-9.32273	1.13E-20	1.03E-17
	<i>Serratia</i> sp. LS-1	5.682808	-22.4188	2.451911	-9.14341	6.05E-20	4.40E-17
	<i>Burkholderia mallei</i>	15.64886	-23.794	2.921648	-8.14405	3.82E-16	2.32E-13
	Enterobacteriaceae bacterium ENNH2	15.55911	-21.9864	2.921651	-7.52535	5.26E-14	2.73E-11
	<i>Achromobacter ruhlandii</i>	93.17166	-8.3322	1.779652	-4.68193	2.84E-06	0.001149
	<i>Pseudomonas</i> sp. A214	13.08098	-5.67961	1.421667	-3.99504	6.47E-05	0.02034
	<i>Pseudomonas</i> sp. St29	12.09194	-5.43832	1.358924	-4.00193	6.28E-05	0.02034

Table S3B: DESeq2 results comparing healthy appearing skin versus lymphoma-affected skin after removal of reads mapping to *homo sapiens* additional

		baseMean	log2FoldChange	lfcSE	stat	pvalue	padj
More abundant in controls	<i>Bordetella pertussis</i>	168.646922	-27.0590291	2.531905	-10.6872	1.17E-26	4.25E-23
	<i>Streptomyces</i> sp. PVA 94-07	13.5808162	-23.62261963	2.511117	-9.40722	5.09E-21	9.27E-18
	<i>Methylobacterium oryzae</i>	5.71572359	-22.42307046	2.413935	-9.28901	1.56E-20	1.89E-17
	<i>Serratia</i> sp. LS-1	5.55394539	-22.40099735	2.452874	-9.13255	6.69E-20	6.08E-17
	Enterobacteriaceae bacterium ENNH2	15.2269105	-23.77994882	2.921655	-8.13921	3.98E-16	2.72E-13
	<i>Burkholderia mallei</i>	14.7909703	-23.73784285	2.921668	-8.12476	4.48E-16	2.72E-13
	<i>Streptomyces</i> sp. SM17	7.98191474	-20.97608447	2.849455	-7.36144	1.82E-13	9.46E-11
	<i>Achromobacter ruhlandii</i>	89.1918983	-8.227766811	1.777764	-4.62815	3.69E-06	0.001678
	<i>Pseudomonas</i> sp. St29	11.4377574	-5.352938714	1.356342	-3.9466	7.93E-05	0.032042
	<i>Pseudomonas</i> sp. A214	12.1683667	-5.499267147	1.426912	-3.85396	0.0001162	0.042281
More abundant in lesions	<i>Staphylococcus argenteus</i>	87.1459201	0.410660923	0.52976	0.77518	0.4382318	0.683432

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y identified by BRACKEN. No species are found more abundant in lesional skin as adjusted p-value for *S. argenteus* increased to 0.7. The species

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Table with columns for taxonomic classification (Kingdom, Phylum, Class, Order, Family, Genus, Species) and a grid of numerical values representing relationships between various species. The table is organized into 10 columns of species groups, each starting with a taxonomic label and a unique ID (e.g., Q1001, Q1002).

Table with columns for taxonomic ranks (Kingdom, Phylum, Class, Order, Family, Genus, Species) and corresponding OTU IDs. The table lists various bacterial and fungal taxa such as Bacillus, Proteobacteria, Firmicutes, and Ascomycota, along with their respective OTU identifiers.

Table with 4 columns: ID, Name, and 100 columns of numerical values (0.00). The table lists various biological taxa and their corresponding values across 100 different categories.

Table with columns for ID, Name, and 40 numerical values (0.0% or 100%). The table lists various biological taxa and their corresponding values across 40 different categories or metrics.

Table with 100 columns and 100 rows, containing a grid of 0.0% values. The table is organized into a 10x10 grid of 10x10 sub-tables. Each cell contains the value '0.0%'. The text is partially obscured by a large, faint watermark in the center of the page.

Sample	TA	TG	AA
P10_19	47.0%	52.9%	0.1%
P10_20	55.3%	44.7%	0.0%
P11_21	98.6%	1.3%	0.1%
P11_22	99.3%	0.6%	0.1%
P12_23	0.7%	99.1%	0.2%
P12_24	1.8%	98.1%	0.2%
P13_25	4.6%	95.3%	0.1%
P13_26	96.1%	3.9%	0.0%
P14_27	34.4%	65.6%	0.0%
P14_28	20.0%	79.9%	0.0%
P15_29	99.3%	0.7%	0.0%
P15_30	99.9%	0.1%	0.0%
P16_31	0.1%	8.3%	91.6%
P16_32	96.3%	3.6%	0.0%
P17_33	0.3%	6.2%	93.5%
P17_34	0.1%	8.2%	91.6%
P18_35	0.4%	99.2%	0.4%
P18_36	3.1%	92.4%	4.5%
P19_37	0.5%	7.7%	91.8%
P19_38	0.2%	4.9%	94.9%
P1_1	99.9%	0.1%	0.0%
P1_2	97.8%	2.2%	0.1%
P20_39	0.0%	99.3%	0.6%
P20_40	0.2%	97.3%	2.5%
P2_3	91.8%	8.2%	0.0%
P2_4	75.6%	24.4%	0.0%
P3_5	1.7%	17.3%	81.1%
P3_6	3.7%	15.3%	80.9%
P4_7	3.0%	1.2%	95.9%
P4_8	97.8%	1.1%	1.1%
P5_10	94.0%	5.9%	0.1%
P5_9	37.8%	12.3%	49.9%
P6_11	98.1%	1.9%	0.0%
P6_12	99.4%	0.6%	0.0%
P7_13	99.0%	1.0%	0.0%
P7_14	99.8%	0.2%	0.0%
P8_15	0.3%	7.0%	92.7%
P8_16	0.4%	6.0%	93.5%
P9_17	2.9%	97.1%	0.0%
P9_18	94.9%	5.1%	0.0%

Bacterial species	Bacterial genus	Descriptions of human disease	Descriptions of human cutaneous disease
<i>Streptomyces spp.</i>	<i>Actinobacteria</i>	None	None
<i>Streptomyces sp. SM17</i>	<i>Actinobacteria</i>	None	None
<i>Streptomyces sp. PVA 94-07</i>	<i>Actinobacteria</i>	None	None
<i>Bordetella pertussis</i>	<i>Bordetella</i>	Causative agent of pertussis (whooping cough)	None
<i>Methylobacterium oryzae</i>	<i>Methylobacterium</i>	None	None
<i>Serratia spp.</i>	<i>Serratia</i>	<i>Serratia spp.</i> are opportunistic pathogens; Nosocomial infections, infections in immunocompromised patients (e.g. arthritis)	Nosocomial skin and soft tissue infections, skin infections in immunocompromised patients
<i>Serratia sp. LS-1</i>	<i>Serratia</i>	None	None
<i>Burkholderia mallei</i>	<i>Burkholderia</i>	None (causative agent of glanders in animals, e.g. horses)	None
<i>Enterobacteriaceae bacterium</i>	<i>Unclassified Enterobacteriaceae</i>	None	None
<i>Achromobacter ruhlandii</i>	<i>Achromobacter</i>	None	None
<i>Pseudomonas spp.</i>	<i>Pseudomonas</i>	<i>Pseudomonas spp.</i> are opportunistic pathogens; Nosocomial infections; infections in immunocompromised patients	Nosocomial respiratory tract, skin and wound infections, septic in immunocompromised patients
<i>Pseudomonas sp. A214</i>	<i>Pseudomonas</i>	None	None
<i>Pseudomonas sp. st29</i>	<i>Pseudomonas</i>	Reduced IgG-binding in pediatric IBD patients	None