

Genetic mapping of multiple metabolic traits identifies novel genes for adiposity, lipids and insulin secretory capacity in outbred rats

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Abstract

Despite the successes of human genome-wide association studies, the causal genes underlying most metabolic traits remain unclear. We used outbred heterogeneous stock (HS) rats, coupled with expression data and mediation analysis, to identify quantitative trait loci (QTLs) and candidate gene mediators for adiposity, glucose tolerance, serum lipids, and other metabolic traits. Physiological traits were measured in 1519 male HS rats, with liver and adipose transcriptomes measured in over 410 rats. Genotypes were imputed from low coverage whole genome sequence. Linear mixed models were used to detect physiological and expression QTLs (pQTLs and eQTLs, respectively), employing both SNP- and haplotype-based models for pQTL mapping. Genes with cis-eQTLs that overlapped pQTLs were assessed as causal candidates through mediation analysis. We identified 14 SNP-based pQTLs and 19 haplotype-based pQTLs, of which 10 were in common. Using mediation, we identified the following genes as candidate mediators of pQTLs: *Grk5* for a fat pad weight pQTL on Chr1, *Krtcap3* for fat pad weight and serum lipids pQTLs on Chr6, *Ilrun* for a fat pad weight pQTL on Chr20 and *Rfx6* for a whole pancreatic insulin content pQTL on Chr20. Furthermore, we verified *Grk5* and *Krtcap3* using gene knock-down/out models, thereby shedding light on novel regulators of obesity.

INTRODUCTION

Obesity and overweight are major risk factors for poor metabolic health, including dyslipidemia, cardiovascular disease and diabetes [1]. Both genetic and environmental factors contribute to obesity and related metabolic traits, with up to 70% of the population variance attributable to genetics [2]. Although human genome-wide association studies (GWAS) have associated many genomic regions with lipid levels [3], fasting glucose and insulin [4,5], diabetes [6], body mass index (BMI) [7], and waist-hip-ratio (WHR) [8,9], causal genes in most of these loci remain unknown. This is due, in part, to the challenge of collecting gene expression and other -omic phenotypes from relevant human tissues.

Animal models of obesity have several advantages over human studies; environmental and dietary factors are controllable, and -omic data such as transcriptomics can be collected from relevant tissues under controlled conditions. In particular, the heterogeneous stock (HS) rats are an established model for the genetic study of obesity [10,11], and we have recently shown functional concordance in adiposity-associated adipose tissue transcripts between HS rats and humans [12]. The HS are descended from eight fully sequenced inbred founder strains [13,14]. Their genomes are highly heterozygous, each chromosome being a fine-grained mosaic of the founder haplotypes, suitable for high resolution genetic mapping [15,16].

Here, we use the HS rat model to dissect the genetic architecture of metabolic and adiposity-related phenotypes. This work significantly extends our previous study [10,11] in which we mapped physiological QTLs (pQTL) for adiposity traits. First, we use many more animals, assess additional metabolic traits and measure gene expression in two metabolically active tissues. Second, instead of genotyping the animals at a limited set of SNPs with an array, we genotype at a comprehensive genome-wide set of sites using low coverage whole genome sequencing (LC-WGS) followed by imputation. Third, we use mediation analysis to identify candidate causal genes that act in a tissue-specific manner, showing that many pQTL are likely regulated by multiple genes. Finally, we validate two novel genes, *Krtcap3* in liver and *Grk5* in adipose, using in vivo knock-out and cell gene silencing models, respectively.

RESEARCH DESIGN AND METHODS

Animals and phenotypes

The outbred NIH HS rat colony was initiated in 1984 from eight inbred founder strains: ACI/N, BN/SsN, BUF/N, F344/N, M520/N, MR/N, WN/N, WKY/N, and maintained to minimize inbreeding[13]. Rats used in this study were maintained at The Medical College of Wisconsin (NMcwi:HS; RGD_2314009), weaned at 21 days of age and housed 2 per cage in micro-isolation cages in a conventional facility using autoclaved bedding (sani-chips from PJ Murphy). They were given ad libitum access to autoclaved Teklad 5010 diet (Harlan Laboratories) and were provided reverse osmosis water chlorinated to 2-3 ppm. We ran 1519 male rats from 323 families through the experimental pipeline below using approximately 12 animals/batch, with a new batch being saved weekly. We measure the following phenotypes as described below, in [10] and in **Supplementary Table 1**:

- intra-peritoneal glucose tolerance test - **IPGTT**
- body weight - **BW**
- basal fasting glucose - **Gluc0**
- fasting serum insulin - **Ins0**
- glucose area under the curve during the IPGTT - **GluAUC**
- insulin area under the curve during the IPGTT - **InsAUC**
- quantitative insulin sensitive check - **QUICKI**
- body weight at sacrifice at 17 weeks old - **sacBW**
- body length with tail at sacrifice at 17 weeks old - **BLTail**
- body length without tail at sacrifice at 17 weeks old – **BLNoTail**
- fasting serum total cholesterol - **CHOL**
- fasting serum total triglycerides – **TRIG**
- heart weight at sacrifice - **Heart**
- pancreas weight at sacrifice - **Pancreas**
- retroperitoneal visceral fat pads at sacrifice - **RetroFat**
- epididymal visceral fat pads at sacrifice – **EpiFat**
- body weight gain as the difference between BW at sacrifice and BW at IPGTT (ie.sacBW-BW) – **BWGain**
- whole pancreas insulin content (ug/g) – **WPIC**
- left kidney weight at sacrifice - **LftKid**
- right kidney weight at sacrifice - **RigKid**

- both kidneys weight at sacrifice – **TotKid**

Tissues collected at sacrifice were also adjusted to body weight by dividing by sacBW (**Heart/BW, pancreas/BW, RetroFat/BW, EpiFat/BW, LftKid/GW, RigKid/BW, TotKid/BW**).

The IPGTT was conducted at age 16 weeks. After an overnight fast, we measured BW, Gluc0, and Ins0 from each rat. We then injected rats with 1mg/kg glucose, collecting blood glucose and serum for insulin at 15, 30, 60, 90 minutes post injection. We calculated GluAUC, InsAUC, and QUICKI, a measure of insulin sensitivity [17], as follows:

$$GluAUC = \sum \frac{(SG_t + SG_{t+1}) \times \Delta min}{2}$$

Where serum glucose (SG) was measured at t=0, 15, 30, 60, 90 min. InsAUC was calculated using the same formula, where serum insulin replaced SG in the equation.

We calculated QUICKI [17] as $[\log(\text{Ins0}) + \log(\text{Gluc0})]^{-1}$.

At 17 weeks of age, a sub-set of 1144 rats were euthanised after an overnight fast, after which we measured sacBW, BLTail and BLNoTail. We used an enzymatic detection method to measure CHOL and TRIG from trunk blood. We dissected and weighed the heart, pancreas, RetroFat and EpiFat, and calculated BWGain. WPIC and IPGTT serum insulin were measured using an ELISA kit (Alpco Diagnostics, Salem, NH). Liver and adipose tissues were snap-frozen for expression analyses. In order to collect urinary protein levels for another study[18], we euthanised 375 rats at 24 weeks, and weighed LftKid, RigKid, and TotKid. All protocols were approved by the Institutional animal care and use committee at MCW.

Prior to genetic analysis, tissue weights were adjusted to account for body weight by dividing by sacBW. Each phenotype was transformed to approximate normality, as summarized in Supplement Table 1. CHOL and TRIG were log transformed while all other traits except GluAUC (see explanation below) were rank-inverse normal transformed (RINT) as defined below: $RINT(y_i) = \Phi^{-1}\left(\frac{\text{rank}(y_i) - 0.5}{n}\right)$

where $\Phi^{-1}()$ is the inverse cumulative distribution function of the standard normal distribution, y_i is the original phenotype and n is the number of observations. We found that RINT for GluAUC introduced more extreme values than were originally present, which might generate false positive associations. Therefore, we applied a more conservative RINT

transformation (TRINT), where data are mapped to a normal distribution with tails truncated at the θ percentile:

$$\text{TRINT}(y_i) = \Phi^{-1}\left(\theta + \frac{[\text{rank}(y_i) - 1](1 - 2\theta)}{n - 1}\right)$$

$\theta = 0.01$ was chosen for GluAUC as it showed reasonable looking values that appear normal without outliers. This setting limits the most extreme points to approximately 2.33 standard deviation from the mean.

RNA-Seq

RNA from liver and adipose tissue was extracted from subsets of 430 and 415 rats, respectively, selected to maximize genetic diversity (e.g., no more than 1 or 2 rats per family), while encompassing the phenotypic spectrum of fat pad weights. Liver tissue RNA-Seq was run by the Genomics Core at the Medical College of Wisconsin, while adipose tissue RNA-Seq was run by the Genomics Core at Wake Forest School of Medicine.

For liver, poly-A libraries were prepared on the Illumina NeoPrep platform using the TruSeq Stranded mRNA Library prep Kit for NeoPrep (Illumina cat# NP-202-1001). For adipose tissue, Ribo depletion libraries were prepared using the Illumina® TruSeq Stranded Total RNA with Ribo-Zero Gold Preparation kit (Illumina Inc.).

Libraries were run on an Illumina HiSeq 2500 to obtain 37bp paired-end reads for liver and 75bp single-end reads for adipose tissue. We used STAR (v2.6.1a) [19] to align reads to the reference Rn6.0, PICARD (v2.5.0) to remove PCR (polymerase chain reaction) duplicates and featureCount in R package Rsubread [20] to compute gene level expression counts which was later normalised by sequencing depth, gene length and RNA composition using DESeq2 R package (v1.24.0). We excluded very lowly expressed genes with average reads per sample < 1 . The normalised expression of 18,358 genes from adipose and 16,796 genes from liver were then RINT-transformed for eQTL mapping and further analyses.

Low coverage whole genome sequencing and genotype imputation

DNA from the HS rats was sequenced at BGI using 143bp paired-end Illumina reads with mean coverage of 0.24x, followed by imputation using STITCH (v1.3.7) [21]. The STITCH algorithm uses a FAST-PHASE type approach, optimised for low-coverage sequence data. Pre-existing Illumina high-coverage (24-28X) sequence with 143bp paired-end reads from the eight founder strains [14] provided a haplotype reference panel. After quality control

(imputation info score > 0.4 and Hardy-Weinberg Equilibrium p-value $> 10^{-6}$), we retained 4,865,047 imputed SNPs. Imputed genotypes were then compared with a subset of 989 rats genotyped with a 10K Rat SNP array [10] - in which 3,253 SNPs were in common. The concordance and the correlation R^2 was 0.98 and 0.91, respectively, indicating the imputed genotypes were generally accurate. For genetic mapping, we used Plink (v1.9) [22] to remove SNPs in high linkage disequilibrium (LD) ($r^2 > 0.95$), leaving 125,611 SNPs for genetic mapping.

Statistical analyses

Founder haplotype dosages and kinship matrices

Each HS rat chromosome is a mosaic of the eight founder haplotype reference panel, which STITCH [21] represents as founder dosages to account for uncertainty in the haplotype assignment, either because of identity by state between founders, or ambiguities caused by heterozygosity or genotyping error. The STITCH haplotype dosages, which are initialized to be the known founder haplotypes, are dynamically updated during imputation and therefore need not be identical to the original founders. Therefore, we re-computed founder haplotype dosages from the imputed 122K tagging SNP genotypes plus the original founder haplotype reference panel, using R/qt12.

To account for the unequal relatedness between HS rats, we estimated a kinship matrix in two ways. The first was a SNP-based additive kinship matrix, \mathbf{K}_{SNP} , computed from the tagging SNPs, which was used to estimate heritability and genetic correlations for the physiological traits, and in genetic mapping of the expression traits. Heritability and genetic correlations were estimated in bi-variate linear mix model using Model 1 below. The second was a haplotype-based kinship matrix, \mathbf{K}_{HAP} , used for genetic mapping of physiological traits. This was estimated in R/qt12 (v0.24) [23] using the aforementioned founder haplotype dosage information from either all chromosomes (used for SNP-based mapping) or all but one chromosome (used for haplotype-based mapping).

Genetic mapping and analyses of physiological traits

The normalised physiological phenotypes and 126K tagging SNPs were used for all genetic analyses. We conducted both SNP-based and haplotype-based genetic mapping to identify physiological QTLs (pQTLs).

We mapped SNP-based pQTLs using imputed SNP dosages from STITCH with the kinship matrix \mathbf{K}_{HAP} , via the miqtl R package (v1.1.2) [10]. The mixed model for SNP-based pQTL mapping at the SNP indexed by position s is

$$\mathbf{y} = \mathbf{X}\boldsymbol{\alpha} + \mathbf{g}_s\boldsymbol{\beta} + \mathbf{e}, \text{ (Model 1)}$$

where \mathbf{y} is the vector of normalized phenotypes, \mathbf{X} is a design matrix of fixed effect covariates, including coat color, euthanasia order, tissue harvest order, and technician (**Supplementary Table 1**), $\boldsymbol{\alpha}$ is the vector of regression coefficients for these fixed effects, and \mathbf{g}_s is the vector of SNP dosages with regression coefficient $\boldsymbol{\beta}$. The error vector \mathbf{e} has variance-covariance matrix $\mathbf{V} = \mathbf{K}_{HAP}\sigma_g^2 + \mathbf{I}\sigma_e^2$, where σ_g^2 , σ_e^2 are respectively the additive genetic and environmental variance components for the trait. Pearson correlations between physiological traits were estimated in R. We tested association between phenotype and SNP using generalized least squares by pre-multiplying the above equation by the inverse of the matrix square root of \mathbf{V} . We estimated genome-wide significance thresholds by parametric bootstrap, performing genome scans on 500 simulations from a fitted null model (i.e., no QTL) [24,25]. Confidence intervals on pQTL position were defined using LD drop between the peak and neighbouring SNPs, using a threshold R^2 of 0.5.

Haplotype-based mixed-model genetic mapping was performed using R/qlt2 with the haplotype dosages, together with the kinship \mathbf{K}_{HAP} , with equation

$$\mathbf{y} = \mathbf{X}\boldsymbol{\alpha} + \mathbf{H}_s\boldsymbol{\beta} + \mathbf{e}, \text{ (Model 2)}$$

where \mathbf{H}_s is the matrix of haplotype dosages at site s . The genome-wide significance threshold was estimated using permutation and pQTL positional confidence intervals were defined by extending the location of the peak SNP to both sides until all the SNPs within that region had LOD score higher than the peak LOD score minus 1.5 (i.e., 1.5 LOD drop). We converted LOD scores to logP units given that under the null hypothesis $2 \log_e 10 * \text{LOD}$ is distributed as a χ_7^2 random variable.

Heritability and genetic correlations were estimated using GCTA [26] in a bi-variate linear mixed models similar to Models 1 but with the SNP effects excluded. Heritability was estimated as $h^2 = \frac{\sigma_g^2}{\sigma_g^2 + \sigma_e^2}$.

Estimation of founder haplotype effect at physiological QTLs

We refined our estimates of founder haplotype effects at each detected QTL using Diploffect (v0.11) [27] to determine which founders carried non-zero haplotype effects on physiological phenotypes (pQTLs) and gene expression (eQTLs), and whether the QTL is potentially multi-allelic.

Genetic mapping of liver and adipose expression levels

We used Matrix eQTL (v2.3) [28] to map eQTL with the same genotypes and kinship matrix \mathbf{K}_{SNP} restricted to those rats with expression data. We tested transformed normalized gene expression levels for association with SNP dosages in a linear mixed model, as with SNP-based pQTL mapping, except the choice of covariates (**Supplementary Table 1**). We focused on cis-eQTLs in order to identify candidate mediators of pQTLs. A cis-eQTL for a gene was recorded if at least two associated SNPs with $\log P > 5$ mapped within 1 Mb of that gene's location.

For adipose genes, using PCA for gene expression, we identified 28 adipose genes whose expression is highly variable between individuals. Many of these genes are annotated to be expressed in muscle rather than adipose cells, and also one gene (MPZ) is a marker for nerve cells. To control for tissue heterogeneity, we included nerve and muscle proxy variables as covariates in the association model for adipose genes. The nerve proxy was the transformed expression of the MPZ gene and the muscle proxy was the first eigenvector in PCA of the transformed expression of the other 27 genes which showed high variance. The first 10 principal components (PCs) from genotypes were also included as fixed effects f , to control for environmental and genetic effects while batch (ie the pools in which samples were sequenced together) were modelled as random effects. For liver genetic analysis, the covariates included batch (defined as the combination of sequence date and lane, which we modelled as a random effect), RNA integrity number (RIN), the first PC from expression data and the first 10 PCs from genotypes (as fixed effects).

Mediation analysis

For those genes that map as a cis-eQTL and fall within a pQTL, we conducted mediation analysis. Specifically, we assessed whether a gene with a cis-eQTL containing at least two associated SNPs that falls within the interval of a pQTL (as defined by $R^2=0.5$) acts as an intermediate for the physiological trait using the methodology in [10,29]. Briefly, consider gene z with a cis-eQTL mapping within the interval of a pQTL. One potential explanation is that the eQTL and pQTL are driven by the same causal variant, and that the action of the pQTL on the phenotype is partially or fully mediated through the transcript level of gene z . The evidence for this is evaluated by comparisons among three models:

$$\mathbf{y} = \mathbf{X}\boldsymbol{\alpha} + \mathbf{g}^{top}\boldsymbol{\beta} + \mathbf{t}_z\boldsymbol{\gamma} + \mathbf{e} \quad (\text{Model 3})$$

$$\mathbf{y} = \mathbf{X}\boldsymbol{\alpha} + \mathbf{g}^{top}\boldsymbol{\beta} + \mathbf{e} \quad (\text{Model 4})$$

$$\mathbf{y} = \mathbf{X}\boldsymbol{\alpha} + \mathbf{t}_z\boldsymbol{\gamma} + \mathbf{e} \quad (\text{Model 5})$$

where \mathbf{y} is the normalized physiological phenotype, \mathbf{t}_z is the normalised expression for gene z , and \mathbf{g}^{top} is the SNP genotype dosage for the top SNP within the pQTL. Positive evidence for mediation is reported when Model 3 is significantly more predictive of the phenotype than Model 4. Because this test is applied to all n_t genes with cis-eQTL within a given pQTL, the n_t p-values are subject to multiple test correction using the Benjamini-Hochberg false discovery rate (FDR), with significant mediators defined as genes with q-values < 0.1 . For significant mediators, full mediation is implied when Model 3 fails to be significantly more predictive than Model 5 (nominal p-value < 0.05); otherwise, mediation is considered partial.

Transduction of 3T3-L1 cells to knock down Grk5 expression

We grew 3T3-L1 cells, a mouse preadipocyte cell line, under standard culture conditions [30]. The *Grk5* gene was silenced by infecting 3T3-L1 preadipocytes with lentiviral particles to deliver mouse gene-specific shRNA expression vectors (sc-39043-V; Santa Cruz Biotechnology, Santa Cruz, CA) in the presence of polybrene (sc-134220 [8 microgram/mL]; Santa Cruz Biotechnology) according to the manufacturer's protocol. Control shRNA, lentiviral Particles-A (sc-108080; Santa Cruz Biotechnology) were used as a negative control. Cells successfully transduced and stably expressing shRNA were selected using 2 microgram/mL puromycin (A1113803; Gibco, Thermo Fisher Scientific). The RNA of

control and puromycin-selected *Grk5* knock-down 3T3-L1 (n=3 per genotype) cells were isolated and reverse-transcribed into cDNA for real-time PCR quantification of *Grk5* (TaqMan primer #Mm00517039_m1) and *Gapdh* (an endogenous control, TaqMan primer #Mm99999915_g1) to determine the extent of *Grk5* knock-down.

Adipocyte differentiation and TRIG measurement

The 3T3-L1 preadipocytes were differentiated into adipocytes for 7 days as described previously [31,32]. Cellular TRIG was measured from nonsaponified samples after solubilization in Triton-X-100, using a commercially available kit (Wako L-Type Triglyceride M test), and normalized to protein content (Pierce™ BCA Protein Assay Kit) [32].

Data and Resource Sharing

Phenotype data are found in **Supplementary Table 2** and have been deposited in the Rat Genome Database (www.rgd.mcgill.ca, access number RGD:153344611). Genotype data has been deposited in RGD (RGD:153344611). RNASeq data have been deposited in the Gene Expression Omnibus (www.ncbi.nlm.nih.gov/geo/, access number GSE200453 (Liver) and GSE196572 (Adipose))

RESULTS

Metabolic traits are highly correlated and show strong heritability

SNP-based heritabilities, genetic correlations and phenotype correlations of the normalized physiological traits are plotted in **Figure 1** and tabulated in **Supplementary Tables 3**. Statistics for total tissue weights (prior to dividing by body weight) are shown in **Figure 1**, while those for tissue weight fractions are in **Supplementary Figure 1**. Heritabilities ranged between 0.18 and 0.60 and are typical for rat studies of these phenotypes [10]. Heritability was highest for BW and fat pad weights (RetroFat and EpiFat) and lowest for BWGain and BLNoTail (0.54 to 0.6 vs 0.18 to 0.22). Phenotypic (R_p) and genotypic (R_g) correlations between traits tracked each other closely but on average R_g is 19% larger than R_p . Fat pad weight traits, body length (BLTail and BLNoTail) and BW were significantly positively correlated ($0.4 < R_g < 0.95$). These measures were more strongly correlated with insulin traits ($0.25 < R_g < 0.73$) than with glucose traits ($-0.03 < R_g < 0.28$). Fat pad weights were also significantly positively correlated with other metabolic traits: $R_g \sim 0.45$ with TRIG and $R_g \sim 0.35$ with CHOL.

Physiological QTLs

All pQTL exceeding the 10% genome-wide significance thresholds and the strain distribution patterns (SDP) at the top SNPs of each pQTL are shown in **Table 1** and **Figure 2**. We mapped 14 SNP-based pQTL and 19 haplotype-based pQTL, of which 10 overlap. pQTL mapping interval widths range between 0.59 and 8.12 Mb for SNP-based pQTLs and between 0.07 and 7.61 Mb for haplotype-based pQTLs. Several pQTLs detected by both SNP- and haplotype-based mapping and, based on haplotype plots (**Supplementary Figure 2**), are likely pleiotropic: pQTLs on Chr1:180Mb associate with TRIG, EpiFat/BW and RetroFat/BW; pQTLs on Chr6:27Mb associate with CHOL, TRIG and RetroFat/BW; pQTLs on Chr8:50Mb associate with CHOL and TRIG; pQTLs on Chr10:101Mb associate with WPIC and EpiFat/BW; and pQTLs on Chr19:52Mb associate with BW, BLNoTail and EpiFat. We also identified a pQTL on Chr16 that associate with both BW and RetroFat/BW using only haplotype-based mapping. Other pQTLs mapped to overlapping regions but are unlikely to be pleiotropic based on having differing haplotype effects (**Supplementary Figure 2**): Chr10: 101Mb for BWGain overlaps the Chr10:101Mb QTL for WPIC and EpiFat/BW; Chr20:6Mb maps TotKid/BW and EpiFat. Fat pad weights that were not divided

by sacBW mapped to generally the same regions as those divided by sacBW as shown in **Supplementary Table 4**. Several glucose and insulin measures lacked genome-wide significant pQTL (**Supplementary Figure 3**) despite strong heritability. We identified a likely missassembly in the Rn6.0 reference for Heart Weight on Chr5, where two pQTL separated by 50Mb were in strong LD (shown as diamonds in **Figure 2**). On reference Rn3.4 these loci are linked, and the pQTLs represent a single region.

Cis-Expression QTLs

We analysed 16,796 and 18,358 transcripts with detectable expression levels in liver and adipose, respectively. Using SNP-based mixed models we mapped 2,267 liver and 2,226 adipose cis-eQTLs with Benjamini-Hochberg false discovery rates (FDR) of 0.00024 for liver and 0.00028 for adipose (**Supplement Table 1, 5 and 6**).

Mediation analysis to identify candidate genes

We performed mediation analysis to identify candidate causal genes with cis-eQTLs in either tissue that overlapped a SNP-based pQTL. The number of genes with overlapping cis-eQTLs in each pQTL ranged from 1 to 15 in liver and from 1 to 14 in adipose (average number of 5 genes), cumulatively representing 238 candidate genes with cis-eQTLs within pQTLs (**Supplementary Table 7**). We tested if the expression of the gene could fully or partially explain the effect of the pQTL. We identified four full mediators (three in liver and one in adipose) and 41 partial mediators (17 in liver and 24 in adipose), listed in **Table 2**. Many of the partial mediators were correlated with the phenotypic trait (**Supplementary Table 8**).

Full mediator: Grk5

There are 12 genes within the pQTL on Chr1:280-282 Mb for RetroFat/BW, EpiFat/BW, and TRIG, but only liver *Cacull* and adipose *Grk5* cis-eQTLs overlap this region (**Supplementary Table 5**). Mediation analysis identified only adipose *Grk5* as a full mediator for RetroFat/BW and EpiFat/BW, and a partial mediator for TRIG (**Figure 3A-C**). The estimated haplotype effects at the pQTLs show HS founders WKY and BUF increase both fat pad weight, TRIG and *Grk5* expression, consistent with the positive correlation between *Grk5* and the phenotypes ($0.11 < R_p < 0.16$ – **Figure 3D**). Thus BUF and WKY

haplotypes likely increase the expression of adipose *Grk5*, which then increases fat pad weight and TRIG levels.

Compared to control shRNA-treated cells, Day 0 (D0) undifferentiated *Grk5* shRNA-treated 3T3-L1 preadipocytes had reduced *Grk5* mRNA levels by 50% ($p=0.029$). Consistent with the findings from mediation analysis, there was significantly decreased adipocyte TRIG content in Day 7 (D7) differentiated *Grk5* knock-down 3T3-L1 adipocytes relative to control adipocytes ($p = 0.003$) (**Figure 3E**).

Full mediator: Krtcap3

There are 123 genes within the pQTL on Chr6 for RetroFat/BW, CHOL and TRIG, of which 15 liver genes and 14 adipose genes had cis-eQTL (**Supplementary Table 7**). Of these, *Krtcap3* was the only full mediator for RetroFat/BW, and a partial mediator for TRIG (**Fig. 4A-B**). The common top SNP for these traits (chr6_29615083) is private to founder WKY, which is associated with decreased fat pad weight and increased *Krtcap3* expression. This is consistent with the negative correlation between *Krtcap3* liver expression and associated phenotypes ($R_p \sim -0.25$ – **Figure 4C**), suggesting that the WKY haplotype increases the expression of liver *Krtcap3* leading to reduced accumulation of fat pad and TRIG. We used CRISPR-Cas9 to knock-out *Krtcap3* (KO) on the WKY background strain and found that both male and female KO rats exhibit increased body weight at six weeks of age relative to wild-type rats ($T_{22} = 2.348$, $p = 0.028$, $T_{22} = 2.274$, $p = 0.033$, respectively) (**Figure 4D**). Subsequent work has shown that *Krtcap3* knock-out (KO) rats exhibit increased body weight over time, with female rats showing increased fat pad weights but improved insulin sensitivity [33], providing support for this gene's role in adiposity. Several additional genes were identified as partial mediators, with different genes acting in adipose vs liver (**Table 2**), indicating multiple causal genes may underlie this locus.

Full mediator: Rfx6

There are 25 genes within the 1.4 Mb pQTL on Chr20:31.43-32.83 Mb for WPIC, of which four liver-expressed genes and three adipose-expressed genes map cis-eQTLs. Of these, liver *Rfx6* is a full mediator for WPIC. The founder haplotypes ACI and WKY are associated with decreased WPIC and *Rfx6* expression, consistent with the positive correlation between *Rfx6*

and WPIC ($R_p \sim 0.15$ – **Figure 5**). These data suggest that the ACI and WKY haplotypes decreased *Rfx6* expression leading to decreased WPIC.

Full mediator: Ilrun

There are 27 genes within the 0.79 Mb pQTL on Chr20:7.28-8.08 Mb for EpiFat/BW, of which seven liver and ten adipose genes have cis-eQTLs. Although expressed in both tissues, only liver *Ilrun* is a full mediator for EpiFat/BW. The founder haplotype WKY is associated with both decreased EpiFat/BW and *Ilrun* liver expression. Their positive correlation ($R_p \sim 0.17$ – **Figure 6**) suggests WKY reduces *Ilrun* expression which decreases EpiFat/BW.

DISCUSSION

Although many loci have been identified in human GWAS for BMI and WHR [8,9], the causal genes underlying many of these loci remain unknown. In this study we addressed this challenge in outbred HS rats by collecting transcriptome data in two metabolically active tissues from the same animals for which we had in-depth metabolic phenotypes, enabling us to assess causality. We mapped 23 pQTLs for 13 metabolic traits, including six pleiotropic loci. We used mediation analysis to identify candidate causal genes, showing that multiple tissue-specific mediators underlie several loci. We identified four full mediators and verified two novel genes (*Krtcp3* and *Grk5*) experimentally. Our work demonstrates the effectiveness of imputation from LC-WGS for genotyping outbred populations, and the power of mediation analysis for identifying candidate causal genes that regulate physiological phenotypes.

In addition to identifying causal mediators, this study extends our previous work [10,11] by investigating a broader spectrum of metabolic traits including fasting lipids, glucose tolerance, insulin sensitivity, and whole pancreas insulin content. We also employed both SNP-based and haplotype-based mapping; the latter of which can reveal which founder alleles have contrasting phenotypic effects and whether they have a more complex structure, potentially suggesting the presence of multiple linked causal variants [34]. In addition, we genotyped using LC-WGS followed by imputation, thereby increasing the number of markers from previous work [10]. We recommend the LC-WGS/imputation strategy as an economic way to genotype populations; it also provides data for future structural variation analysis [36].

By increasing the numbers of SNPs and animals, we replicated known adiposity loci [10] at higher significance and mapped additional loci. We also replicated a subset of BW and fat pad weight pQTLs from a mega-analysis in HS rats [11]. In addition to 13 loci for BW and fat pad traits, we identified three loci for CHOL, four for TRIG, two loci for WPIC, and four loci for tissue weights. Surprisingly, we mapped no genome-wide significant loci for the glucose and insulin traits, despite strong heritability, suggesting these traits are highly polygenic and larger sample sizes are needed. We identified full mediators underlying four loci, with partial mediators underlying several additional loci. Liver and adipose mediators often differ, demonstrating that causal genes are likely tissue-specific. We critically discuss the evidence for causality for each full mediator below.

Adipose *Grk5* is a full mediator for EpiFat/BW and RetroFat/BW on rat Chr1 and a partial mediator for TRIG. Previous work has shown that *Grk5* null mice show protection against diet-induced obesity, reduced expression of adipogenesis genes, glucose tolerance and insulin sensitivity compared with wild-type littermates [38,39]. Human GWASs have associated *Grk5* with type-2 diabetes in Chinese cohorts [40,41] and lipid levels in Europeans [7]. Our current work demonstrates experimentally that *Grk5* knock-down in rat 3T3L1 cells leads to decreased adipose TRIG accumulation in adipocytes, supporting a role for this gene in adiposity. We have since demonstrated that *Grk5* is critical for adipogenesis in 3T3-L1 pre-adipocytes, potentially by controlling ERK activity (publication in process). Within the same pQTL there is a nonsynonymous coding variant in the gene *Prllhr* private to the BUF and WKY founders, and which was previously suggested as a candidate [10,11]. Although *Prllhr* is associated with feeding behavior [42,43], *Prllhr* is mainly expressed in brain and adrenal tissue, so our expression data could not shed light on its role as a mediator, and it is possible that both adipose *Grk5* and brain *Prllhr* are causal.

Liver *Ktrcap3* is a full mediator for RetroFat/BW at the Chr6 pQTL, replicating previous work [10]. *Ktrcap3* does not fall within human GWAS loci for BMI or WHR, but has been identified as a pleiotropic gene for obesity, dyslipidemia and type 2 diabetes using a multi-variate analysis [44]. Recent work by our group confirmed *Ktrcap3*'s role in adiposity using a rat *Ktrcap3* knock-out; both male and female knock-out rats have increased body weight,

with females showing increased adiposity and insulin sensitivity [33]. Interestingly, *Krtcap3* is unlikely the only gene acting in this locus. *Adcy3* also falls in this region and was previously nominated as a functional candidate in the rat [10,11], via a coding variant as opposed to expression levels. *Adcy3* is associated with monogenic and polygenic obesity in humans [45,46,47,48], and has been shown to act via coding variation that impacts protein folding or function [49,50], and altered expression [45]. Based on our functional validation of *Krtcap3* [33] coupled with strong support for *Adcy3* in human studies, it is likely both genes are causal for adiposity. In addition, our work identifies several partial mediators in both liver and adipose tissue, emphasizing the complexity of the Chr6 adiposity locus.

Liver *Ilrun* expression is a full mediator for EpiFat/BW on rat Chr20. *Ilrun* was previously named *LOC294154* in rats and *C6orf106* in humans. *C6orf106* associates with anthropometric traits including height [51], weight [52], BMI [53], body fat ratio [54] in humans and might drive persistent thinness versus severe obesity [55]. The mouse ortholog is implicated in lipid metabolism and hepatic lipoprotein production [56], making this a highly attractive candidate at this locus.

Liver *Rfx6* expression is a full mediator for WPIC at a separate Chr20 locus. *Rfx6* plays a role in controlling the formation of pancreatic islets and production of insulin in mice and humans [57]. Inactivation of *Rfx6* in adult beta cells impairs insulin secretion via altered glucose sensing [58]. In addition, *Rfx6* associates with monogenic diabetes of the young [59]. Although *Rfx6* is not expressed in livers of mice or humans, it is expressed in liver of rats [60,61]. We suspect that the liver signal that we found here is not tissue specific and may be representative of the role of this gene in the pancreas. Together, this evidence suggests that genetic variation in *Rfx6* contributes to metabolic dysfunction and/or diabetes susceptibility.

Conclusions

Utilizing multiple metabolic phenotypes and transcriptome data from relevant tissues measured in the same animals, we identify four candidate causal genes and experimentally validate two of them. This work demonstrates the power of mediation analysis for delineating genetic effects underlying multiple related phenotypes. Furthermore, it emphasizes tissue

specificity of genetic effect and the potentially complex underpinnings of several metabolic loci due to multiple candidate gene drivers.

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TABLES

Table 1 - Physiological QTLs (pQTLs) detected in male HS rats.

Physiological QTL information							SDP at peak SNP	Mapping method
Phenotype	Peak SNP	Start	End	Size	logP	Thresh		
TRIG	chr1_281420356	280.62	282.13	1.5	6.61	5.36	GGAGGGGA	S,H
EpiFat/BW	chr1_281420356	280.62	282.13	1.5	6.57	5.42	GGAGGGGA	S
RetroFat/BW*#	chr1_281420356	280.62	282.13	1.5	7.1	5.40	GGAGGGGA	S,H
RetroFat/BW	chr2_92372860	92.34	92.5	0.15	6.11	5.35	TTTTTTTC	H
LftKid/BW	chr2_181254773	180.78	181.32	0.54	6.42	5.69	GTTTTTTG	H
Pancreas/BW	chr3_45709398	44.95	45.83	0.88	6.07	5.34	GCCCGCCC	H
RetroFat/BW#	chr3_95402825	92.3	98.31	6.01	5.65	5.40	GGGGAGAG	S
TRIG	chr4_178497175	178.33	178.74	0.41	6.13	5.18	CTTTTCCC	H
BW	chr6_3528327	3.48	3.72	0.24	5.68	5.39	AACCCACC	H
CHOL	chr6_29652195	29.47	31.22	1.76	7.34	5.38	CCCCTCCT	S,H
TRIG	chr6_27196786	27.2	27.78	0.59	6.18	5.36	TTCTTTTC	S,H
RetroFat/BW	chr6_29615083	23.12	31.24	8.12	10.48	5.40	GGGGGGGT	S,H
BW	chr7_35933160	35.93	35.93	0.0	5.93	5.39	CCCCGGGC	S,H
CHOL	chr8_50803232	50.04	51.55	1.51	6.62	5.38	GGAAGAAG	S,H
TRIG	chr8_50033903	49.65	50.03	0.38	9.79	5.36	AGGGGGGG	S,H
BWGain	chr10_101864862	101.53	102.03	0.49	5.69	5.32	CTTTCTCT	S
WPIC	chr10_100875066	100.69	102.52	1.83	6.08	5.14	TTATTTTA	H
EpiFat/BW	chr10_102451138	102.08	102.75	0.68	5.99	5.54	CCCCGGGC	H
BLTail#	chr12_4632329	0.7	6.49	5.79	5.42	5.36	TGTGGGGT	S
CHOL	chr12_36276781	34.48	36.91	2.43	5.47	5.38	CCAACCCC	S
RetroFat/BW	chr13_39553662	37.74	43.71	5.97	5.79	5.35	GTGGGGTG	H
BLTail	chr14_19969820	19.94	24.13	4.19	7.09	5.36	CGGCCCGC	S,H
RetroFat/BW	chr16_17476265	10.18	17.78	7.61	5.45	5.35	ATAAAAAT	H
BW	chr16_17470411	17.46	17.53	0.07	6.13	5.39	CCTTCTTC	H
BW	chr19_52391237	51.87	54.4	2.53	7.67	5.39	AAAGGGAA	S,H
BLNoTail	chr19_52391237	51.87	54.44	2.57	6.14	5.40	AAAGGGAA	S
TotKid/BW	chr20_5823811	5.81	6.28	0.47	5.29	5.09	GGCCCCCC	H
EpiFat/BW	chr20_7957438	7.28	8.08	0.79	6.18	5.42	CCCCCCT	S,H
WPIC	chr20_32707737	31.43	32.83	1.4	5.54	5.28	GTTTTGTG	S,H
EpiFat/BW	chrX_34392885	33.76	38.45	4.68	5.8	5.42	CCGCGGCG	S,H

Each row shows one pQTL for the trait in Phenotype column. Peak SNP shows its position on chromosome that it is located on. Start, End and Size indicate the starting, ending position and interval of each pQTL. logP is the $-\log_{10}(\text{Pvalue})$ of the peak SNP. Thresh is the threshold estimated from parametric bootstrap. The strain distribution pattern (SDP) at the peak SNP of the eight founders uses the following order: ACI-BN-BUF-F344-M520-MR-WN-WKY. In terms of mapping method, (H) is for pQTL detected by Haplotype-based only, (S) if by SNP-based only, and (S,H) if by both methods.

Six pQTLs affecting multiple physiological traits were grouped together in the first column and marked in bold. The heart weight QTL on Chr. 5 is not listed in the table due to the likely genome misassembly at this location. pQTLs that replicate those reported in [10] or [11] are indicated by * and # respectively.

Table 2 - Full and Partial Mediators within each pQTL. pQTL are labelled by the peak associated SNP as in Table 1. Pleiotropic loci have been bolded.

Phenotype	Peak SNP	Liver mediators		Adipose mediators	
		Partial	Full	Partial	Full
TRIG	chr1_281420356			<i>Grk5</i>	
EpiFat/BW	chr1_281420356				<i>Grk5</i>
RetroFat/BW	chr1_281420356				<i>Grk5</i>
RetroFat/BW	chr3_95402825			<i>Pdhx;Rcn; RGD1563222; Tcp1111</i>	
CHOL	chr6_29652195	<i>Fam228b</i>		<i>Dnaje27</i>	
TRIG	chr6_27196786	<i>Hadhb; Krtcap3</i>		<i>Dnaje27;Dnmt3a</i>	
RetroFat/BW	chr6_29615083	<i>Slc30a3; Hadhb; Fam228b; Ypel5</i>	<i>Krtcap3</i>	<i>Alk; Dnaje27; Togaram2; Atraid; Gare2; Clip4 RGD1304963</i>	
BWGain	chr7_42495997			<i>Tmtc3</i>	
CHOL	chr8_50803232	<i>Fxyd2;Apoc3</i>		<i>Bac1</i>	
TRIG	chr8_50033903			<i>Mpl2; Smim35</i>	
CHOL	chr12_36276781	<i>Scarb1</i>		<i>Dhx37</i>	
BLTail	chr12_4632329			<i>Retn; Cers4; Stard13; Snapc2</i>	
BLTail	chr14_19969820	<i>Sult1d1; RGD1559459; Afm</i>			
BW	chr19_52391237	<i>AABR07044001.3; AABR07044001.4</i>			
BLNoTail	chr19_52391237	<i>AABR07044001.4; Dnaaf1</i>		<i>Slc38a8</i>	
EpiFat/BW	chr20_7957438		<i>Ilrun</i>		
WPIC	chr20_32707737		<i>Rfx6</i>		

MAIN FIGURES LEGENDS

Figure 1 - Heritabilities, genetic and phenotypic correlations for physiological traits in up to 1519 male HS rats. The main diagonal contains the heritabilities, the upper triangle the phenotypic correlations and the lower triangle the genetic correlations. Dashes indicate missing data for phenotypic correlations, where traits were measured on different animals.

Figure 2 - Porcupine plot of pQTLs detected as genome-wide significant using (A) haplotype-based or (B) SNP-based mixed models. The x-axis shows genomic position and y-axis the significance as negative log₁₀ of the p-value of the test of association. Traits are color-coded as indicated in legend. Thresholds are shown as horizontal lines and indicate the genome-wide 10% thresholds as determined by permutation in haplotype and bootstraps in SNP-based mapping. Haplotype association thresholds vary between traits whereas those for SNPs are almost the same for all traits. Two pQTLs for Heart weight indicated by diamonds are likely the same locus, probability due to a missassembly in Rn6.0

Figure 3 - Adipose expression of *Grk5* is a full mediator for RetroFat/BW and EpiFat/BW; and a partial mediator for Triglycerides (TRIG). Each row A-C shows mediation analysis for the phenotypes RetroFat/BW, EpiFat/BW and TRIG respectively. Within each row, left to right, are shown (i) box-whisker plots of the estimated haplotype effects with uncertainties at the peak SNP for the phenotype; (ii) the scan across chromosome 1 for SNP-based mixed model for the trait; and (iii) the corresponding scan after including the expression of *Grk5* as a covariate. Row D shows the expression QTL analysis for *Grk5*, in which the right-most panel is a scatter plot of RetroFat/BW vs *Grk5* expression in adipose tissue across 415 rats, color-coded by genotype at the peak SNP of the pQTL for RetroFat/BW, which is private to the founder WKY and also indicates the estimated number of WKY haplotypes. Row E shows that knock-down of *Grk5* decreases total TRIG accumulation in a 3T3L1 adipocyte cell line (white bar) compared to control line (black bar).

Figure 4 – Liver expression of *Krtcap3* is full mediator for RetroFat/BW and partial mediator for Triglycerides (TRIG). See Figure 3 for description of panels. Row C shows the expression of QTL analysis for *Krtcap3*, in which the right-most panel is a scatter plot of RetroFat/BW vs *Krtcap3* expression in liver tissue across 430 rats, color-coded by genotype at the peak SNP of the pQTL for RetroFat/BW, which is private to the founder WKY and also indicates the estimated number of WKY haplotypes. Row D shows body weight at 6 weeks of age in wild-type (WT; black circle) and *Krtcap3* knock-out rats (KO; grey square). Both KO male rats and KO female rats were significantly heavier than WT control. **p*<0.05.

Figure 5 - Liver expression of *Rfx6* is full mediator for Whole pancreas insulin content (WPIC). See Figure 3 and Figure 4 for description of panels.

Figure 6 - Liver expression of *Ilrun* is full mediator for EpiFat/BW. See Figure 3 and Figure 4 for description of panels.

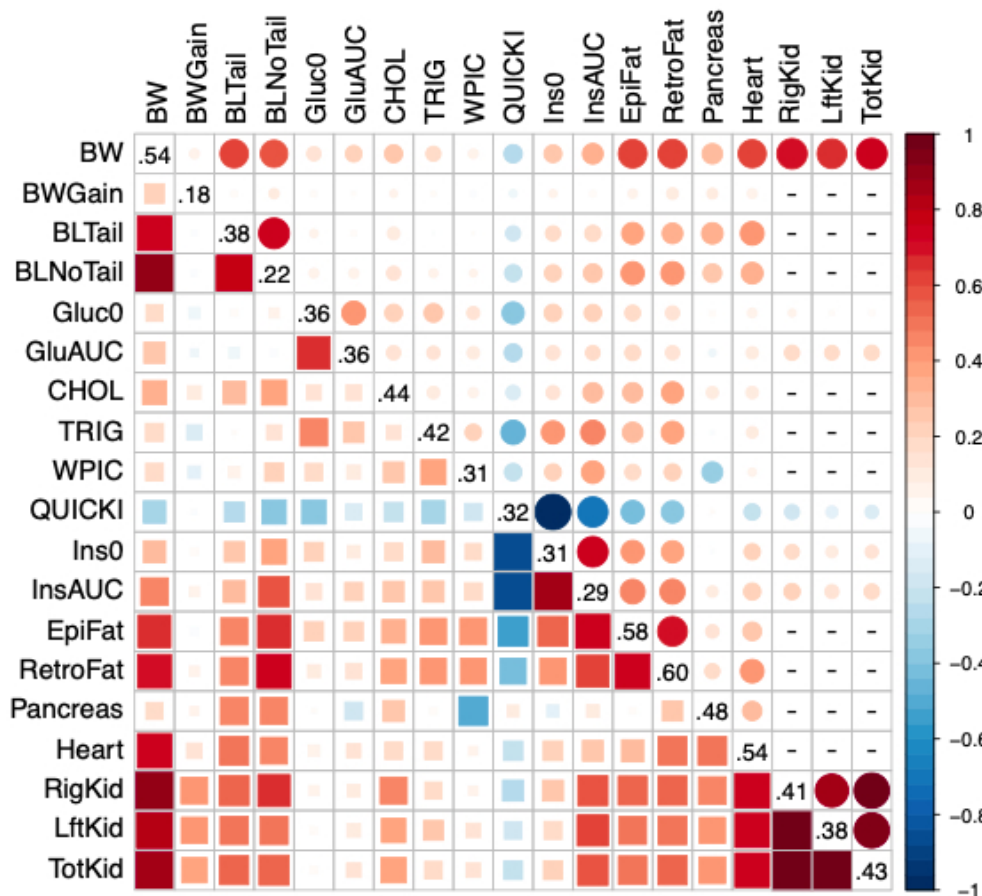


Figure 1 - Heritabilities, genetic and phenotypic correlations for physiological traits in up to 1519 male HS rats. The main diagonal contains the heritabilities, the upper triangle the phenotypic correlations and the lower triangle the genetic correlations. Dashes indicate missing data for phenotypic correlations, where traits were measured on different animals.

198x178mm (72 x 72 DPI)

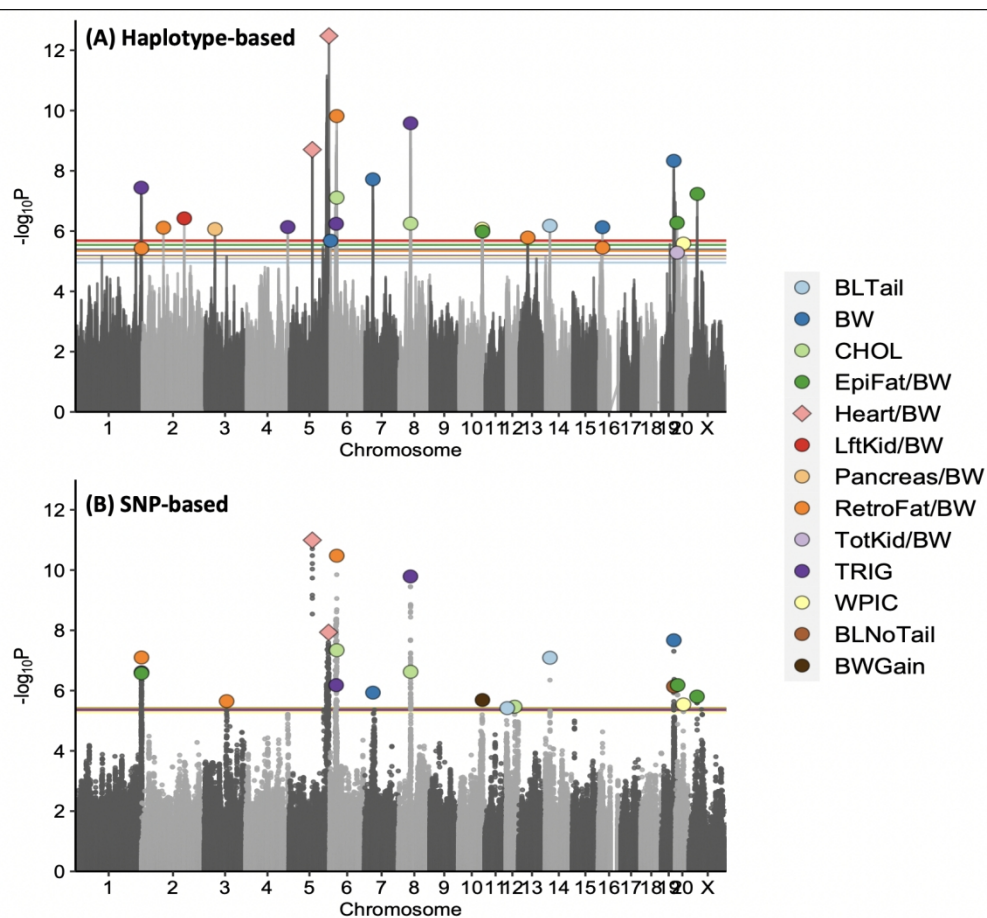


Figure 2 - Porcupine plot of pQTLs detected as genome-wide significant using (A) haplotype-based or (B) SNP-based mixed models. The x-axis shows genomic position and y-axis the significance as negative log 10 of the p-value of the test of association. Traits are color-coded as indicated in legend. Thresholds are shown as horizontal lines and indicate the genome-wide 10% thresholds as determined by permutation in haplotype and bootstraps in SNP-based mapping. Haplotype association thresholds vary between traits whereas those for SNPs are almost the same for all traits. Two pQTLs for Heart weight indicated by diamonds are likely the same locus, probability due to a missassembly in Rn6.0.

300x276mm (144 x 144 DPI)

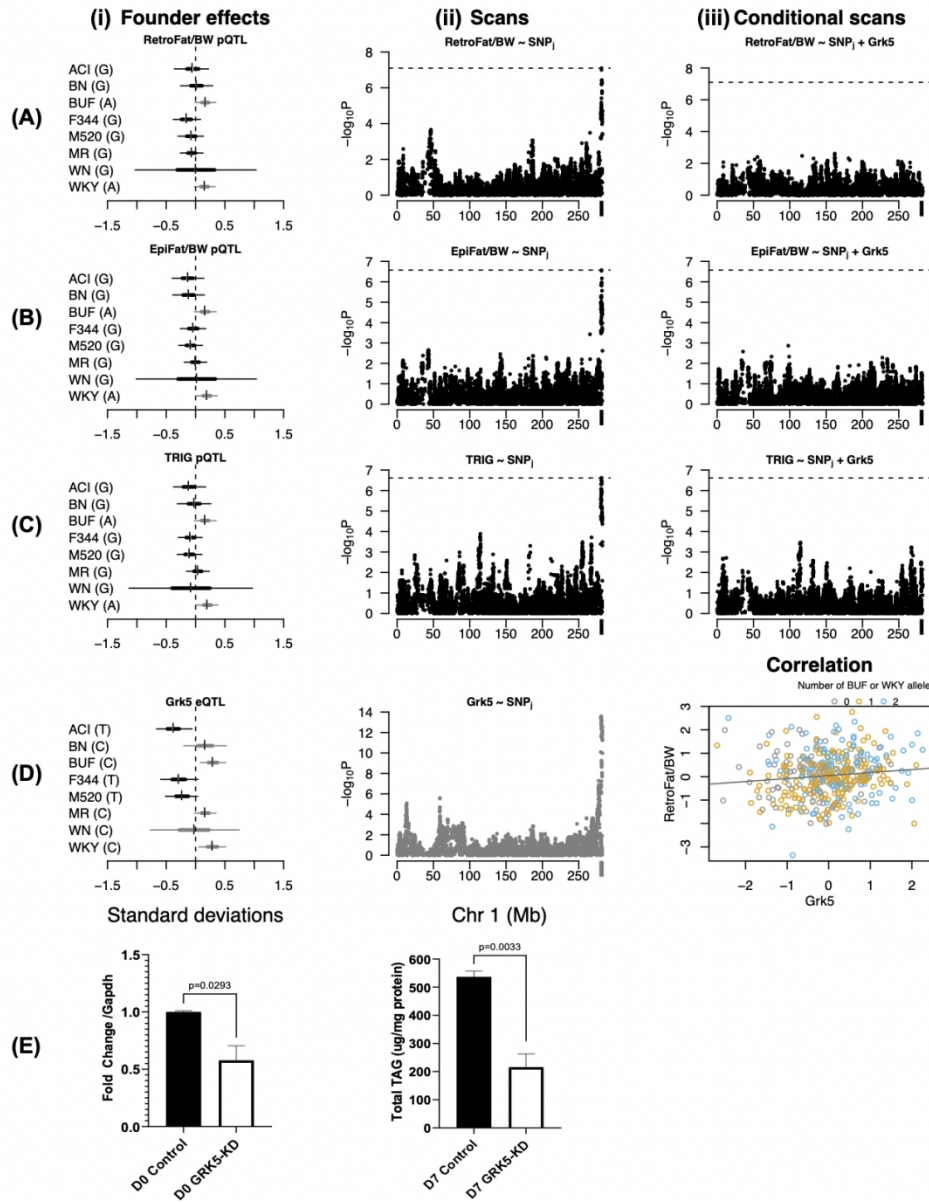


Figure 3 - Adipose expression of Grk5 is a full mediator for RetroFat/BW and EpiFat/BW; and a partial mediator for Triglycerides (TRIG). Each row A-C shows mediation analysis for the phenotypes RetroFat/BW, EpiFat/BW and TRIG respectively. Within each row, left to right, are shown (i) box-whisker plots of the estimated haplotype effects with uncertainties at the peak SNP for the phenotype; (ii) the scan across chromosome 1 for SNP-based mixed model for the trait; and (iii) the corresponding scan after including the expression of Grk5 as a covariate. Row D shows the expression QTL analysis for Grk5, in which the right-most panel is a scatter plot of RetroFat/BW vs Grk5 expression in adipose tissue across 415 rats, color-coded by genotype at the peak SNP of the pQTL for RetroFat/BW, which is private to the founder WKY and also indicates the estimated number of WKY haplotypes. Row E shows that knock-down of Grk5 decreases total TRIG accumulation in a 3T3L1 adipocyte cell line.

232x285mm (144 x 144 DPI)

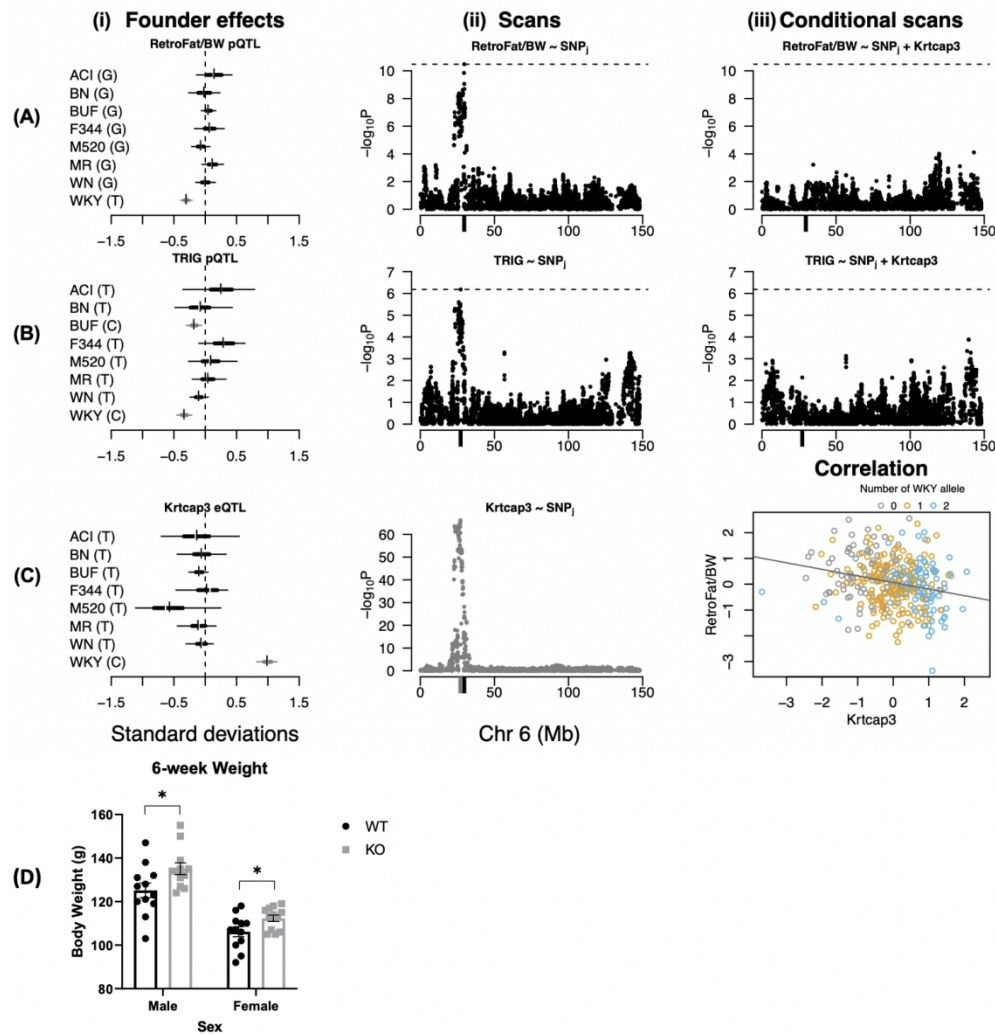


Figure 4 – Liver expression of *Krtcap3* is full mediator for RetroFat/BW and partial mediator for Triglycerides (TRIG). See Figure 3 for description of panels. Row C shows the expression of QTL analysis for *Krtcap3*, in which the right-most panel is a scatter plot of RetroFat/BW vs *Krtcap3* expression in liver tissue across 430 rats, color-coded by genotype at the peak SNP of the pQTL for RetroFat/BW, which is private to the founder WKY and also indicates the estimated number of WKY haplotypes. Row D shows body weight at 6 weeks of age in wild-type (WT; black circle) and *Krtcap3* knock-out rats (KO; grey square). Both KO male rats and KO female rats were significantly heavier than WT control. * $p < 0.05$.

274x285mm (144 x 144 DPI)

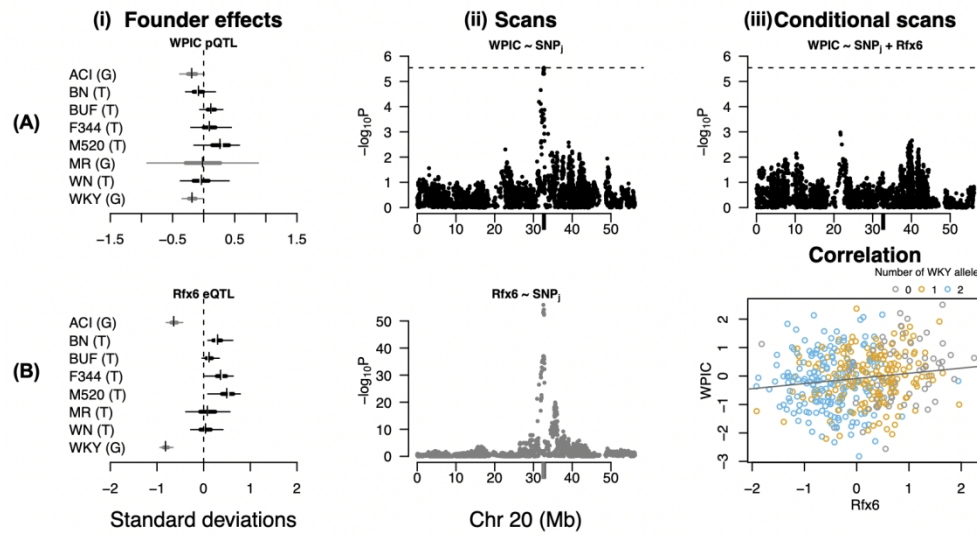


Figure 5 - Liver expression of Rfx6 is full mediator for Whole pancreas insulin content (WPIC). See Figure 3 and Figure 4 for description of panels.

299x161mm (144 x 144 DPI)

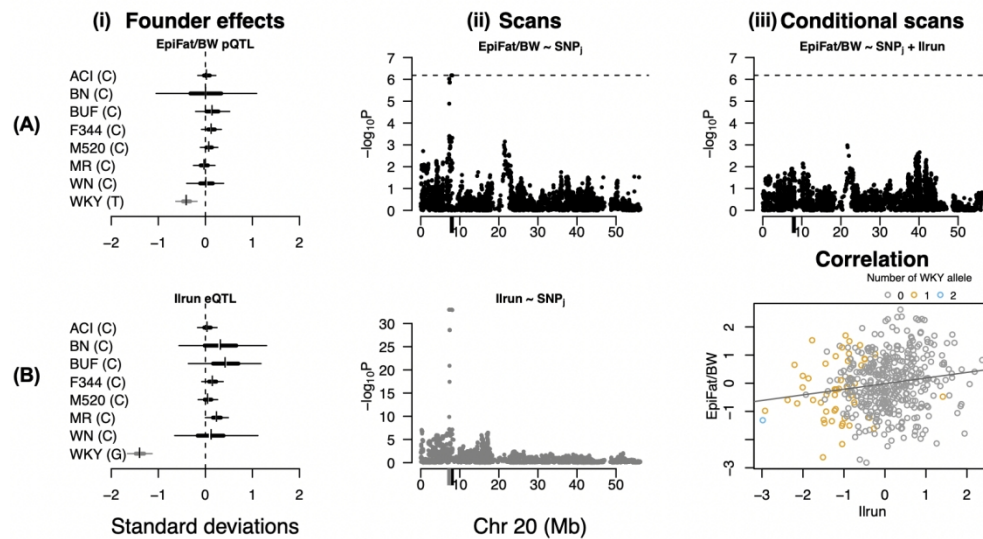


Figure 6 - Liver expression of Ilrun is full mediator for EpiFat/BW. See Figure 3 and Figure 4 for description of panels.

297x165mm (144 x 144 DPI)

SUPPLEMENT - RESEARCH DESIGN AND METHODS

Animals

The outbred NIH heterogeneous stock (HS) rat used in this study came from a colony maintained at The Medical College of Wisconsin (NMcwi:HS; RGD_2314009). A total of 1519 male rats from 323 families were weaned at 21 days of age, housed 2 per cage in micro-isolation cages in a conventional facility using autoclaved bedding (sani-chips from PJ Murphy). They were given ad libitum access to autoclaved Teklad 5010 diet (Harlan Laboratories) and were provided reverse osmosis water chlorinated to 2-3 ppm. We ran animals through the experimental pipeline below using approximately 12 animals/batch, with a new batch being saved weekly.

Phenotypes

Glucose and insulin phenotypes

We calculated GluAUC, InsAUC, and QUICKI, a measure of insulin sensitivity, as follows:

$$GluAUC = \sum \frac{(SG_t + SG_{t+1}) \times \Delta min}{2}$$

Where serum glucose (SG) was measured at t=0, 15, 30, 60, 90 min. InsAUC was calculated using the same formula, where serum insulin replaced SG in the equation.

We calculated QUICKI [17] as $[\log(Ins0) + \log(Gluc0)]^{-1}$.

Phenotype transformation

Prior to statistical genetic analysis, tissue weights were adjusted to account for body weight by dividing by sacBW. Each phenotype was transformed to approximate normality, as summarized in Supplement Table 1. CHOL and TRIG were log transformed while all other traits except GluAUC (see explanation below) were rank-inverse normal transformed (RINT) as defined below:

$$RINT(y_i) = \Phi^{-1} \left(\frac{\text{rank}(y_i) - 0.5}{n} \right)$$

where $\Phi^{-1}()$ is the inverse cumulative distribution function of the standard normal distribution, y_i is the original phenotype and n is the number of observations. We found that RINT for GluAUC introduced more extreme values than were originally present, which

might generate false positive associations. Therefore, we applied a more conservative RINT transformation (TRINT), where data are mapped to a normal distribution with tails truncated at the θ percentile:

$$\text{TRINT}(y_i) = \Phi^{-1} \left(\theta + \frac{[\text{rank}(y_i) - 1](1 - 2\theta)}{n - 1} \right)$$

$\theta = 0.01$ was chosen for GluAUC as it showed reasonable looking values that appear normal without outliers. This setting limits the most extreme points to approximately 2.33 standard deviation from the mean.

RNA-Seq

RNA from liver and adipose tissue was extracted using Trizol. Rats for RNAseq were chosen to maximize genetic diversity (e.g., no more than 1 or 2 rats per family), while still encompassing the full phenotypic spectrum of fat pad weight. Liver tissue RNA-Seq was run by the Genomics Core at the Medical College of Wisconsin, while adipose tissue RNA-Seq was run by the Genomics Core at Wake Forest School of Medicine. For liver, poly-A libraries were prepared on the Illumina NeoPrep platform using the TruSeq Stranded mRNA Library prep Kit for NeoPrep (Illumina cat# NP-202-1001). For adipose tissue, Ribo depletion libraries were prepared using the Illumina® TruSeq Stranded Total RNA with Ribo-Zero Gold Preparation kit (Illumina Inc.).

Libraries were run on an Illumina HiSeq 2500 to obtain 37bp paired-end reads for liver and 75bp single-end reads for adipose tissue. We used STAR (v2.6.1a) [18] to align reads to the reference Rn6.0, PICARD (v2.5.0) to remove PCR (polymerase chain reaction) duplicates and featureCount in R package Rsubread to compute gene level expression counts which was later normalised by sequencing depth, gene length and RNA composition using DESeq2 R package (v1.24.0). We excluded very lowly expressed genes with average reads per sample < 1. The normalised expression of 18,358 genes from adipose and 16,796 genes from liver were then RINT-transformed for eQTL mapping and further analyses.

Low coverage genome sequencing and genotype imputation

All HS rats were Illumina-sequenced using 143bp paired-end reads low coverage sequenced at mean coverage of 0.24x at BGI, followed by imputation using STITCH. The STITCH algorithm uses a FAST-PHASE type approach, optimised for low-coverage sequence data.

DNA from the original eight founder strains were previously Illumina-sequenced at high coverage (24-28X) [14] with 143bp paired-end reads which were used to provide a haplotype reference panel. 4,865,047 imputed SNPs were retained after quality control (imputation info score > 0.4 and Hardy-Weinberg Equilibrium p -value $> 10^{-6}$). Imputed genotypes were then compared with a subset of 989 rats genotyped with a 10K Rat SNP array [10] - in which 3,253 SNPs were in common. The concordance and the correlation R^2 was 0.98 and 0.91, respectively, indicating the imputed genotypes were generally accurate. For genetic mapping we removed SNPs in high linkage disequilibrium (LD) with R^2 threshold of 0.95 using Plink version 1.9, resulting in a tagging set of 125,611 SNPs available for genetic mapping.

Statistical analyses

Founder haplotype dosage

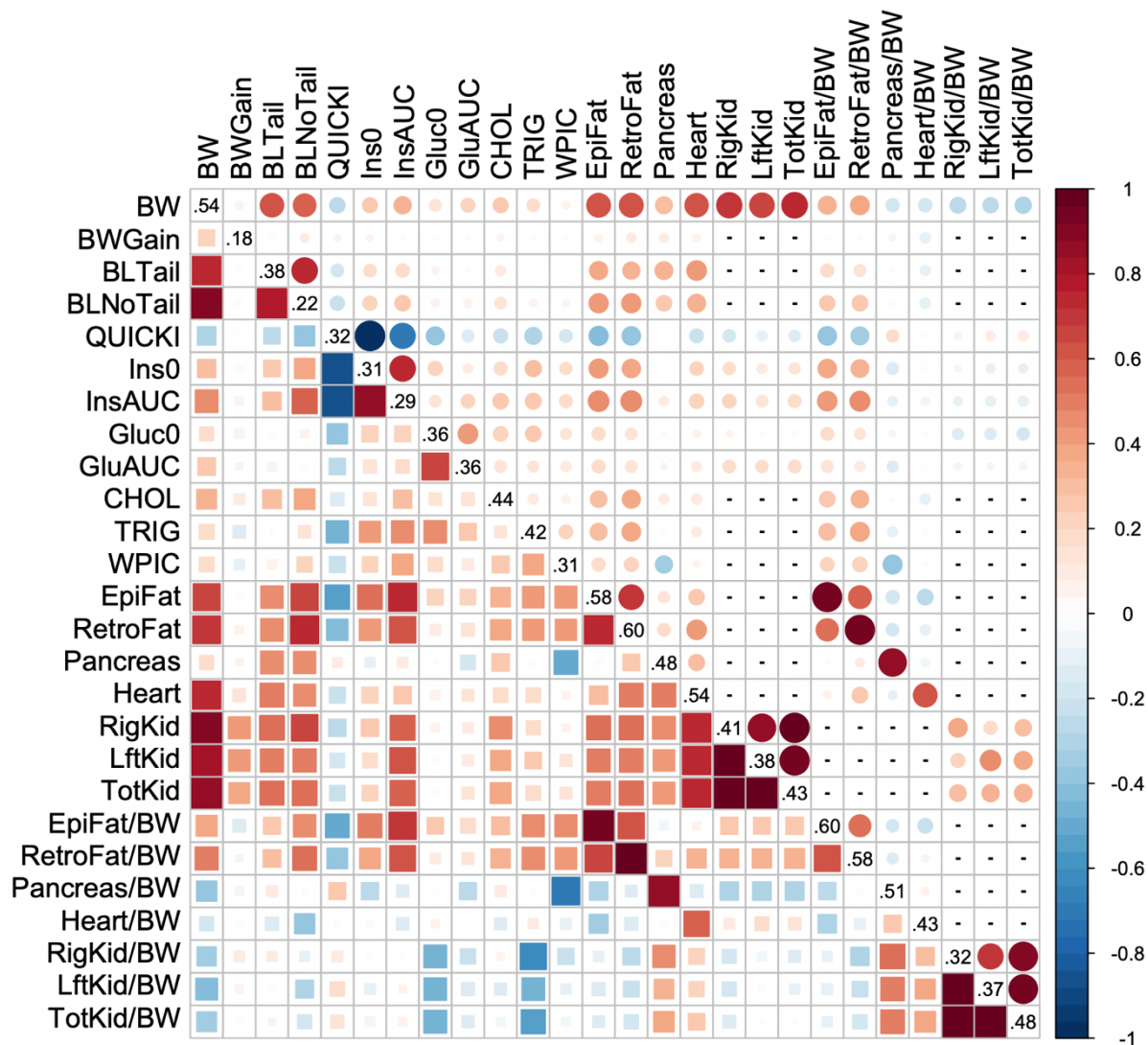
Each HS rat chromosome is a mosaic of the eight founder haplotype reference panel, which STITCH represents as founder dosages to account for uncertainty in the haplotype assignment, either because of identity by state between founders, or ambiguities caused by heterozygosity or genotyping error. The STITCH haplotype dosages, which are initialized to be the known founder haplotypes, are dynamically updated during imputation and therefore need not be identical to the original founders. Therefore, we re-computed founder haplotype dosages from the imputed 122K tagging SNP genotypes plus the original founder haplotype reference panel, using R/qtl2.

Kinship matrices and estimation of heritability and genetic correlations

To account for the unequal relatedness between HS rats, we estimated the kinship matrix. This was done in two ways based on the application needed. The first is a SNP-based additive kinship matrix \mathbf{K}_{SNP} computed from the tagging SNPs, which was used to estimate heritability and genetic correlations and for genetic mapping of the expression traits. Heritability and genetic correlations were estimated in bi-variate linear mix model using Model 1 below. The second kinship \mathbf{K}_{HAP} used for genetic mapping of physiological traits was estimated in R/qtl2 using the founder haplotype dosages computed above and was calculated either for all chromosomes (used for SNP-based mapping) or each chromosome

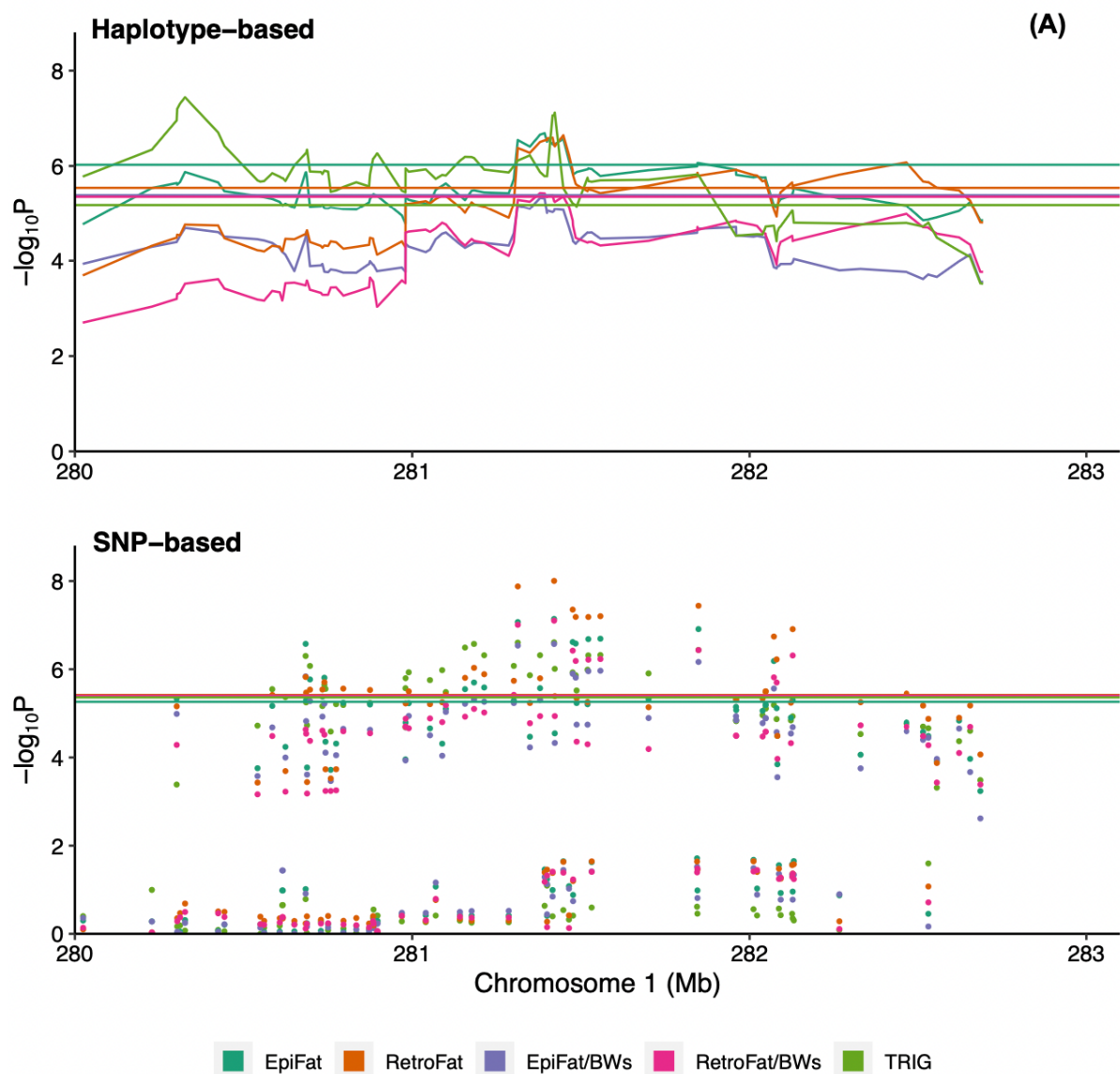
separately by omitting haplotype data from that chromosome (“leave-one-chromosome-out”) (used for haplotype-based mapping).

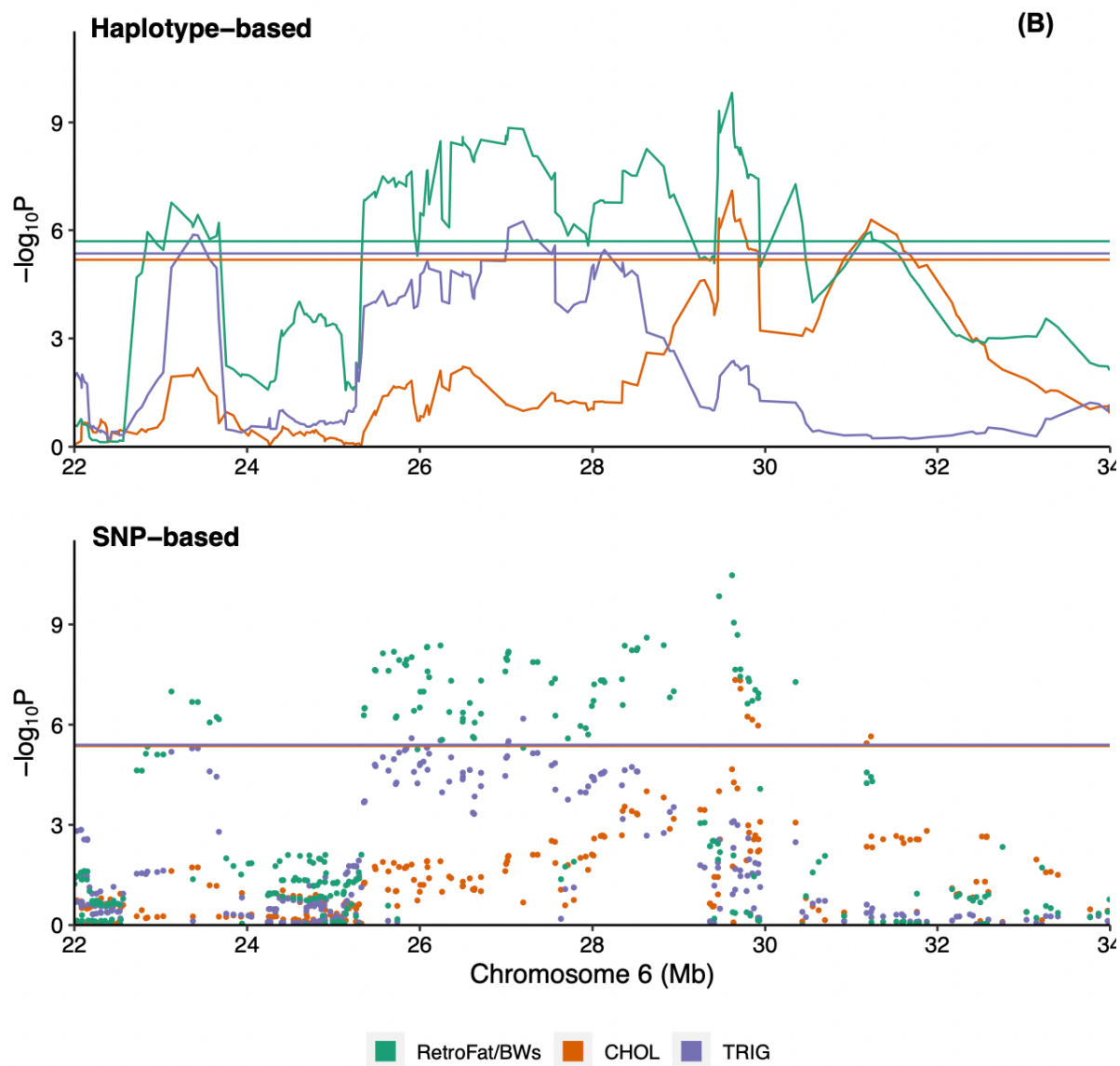
Supplementary. Figure 1 - Heritabilities, genetic and phenotypic correlations for all physiological traits (including tissue normalised to sacBW) in male HS rats. The main diagonal contains the heritabilities, the upper triangle the phenotypic correlations and the lower triangle the genetic correlations. Dashes indicate missing data for phenotypic correlations, where traits were measured on different animals.

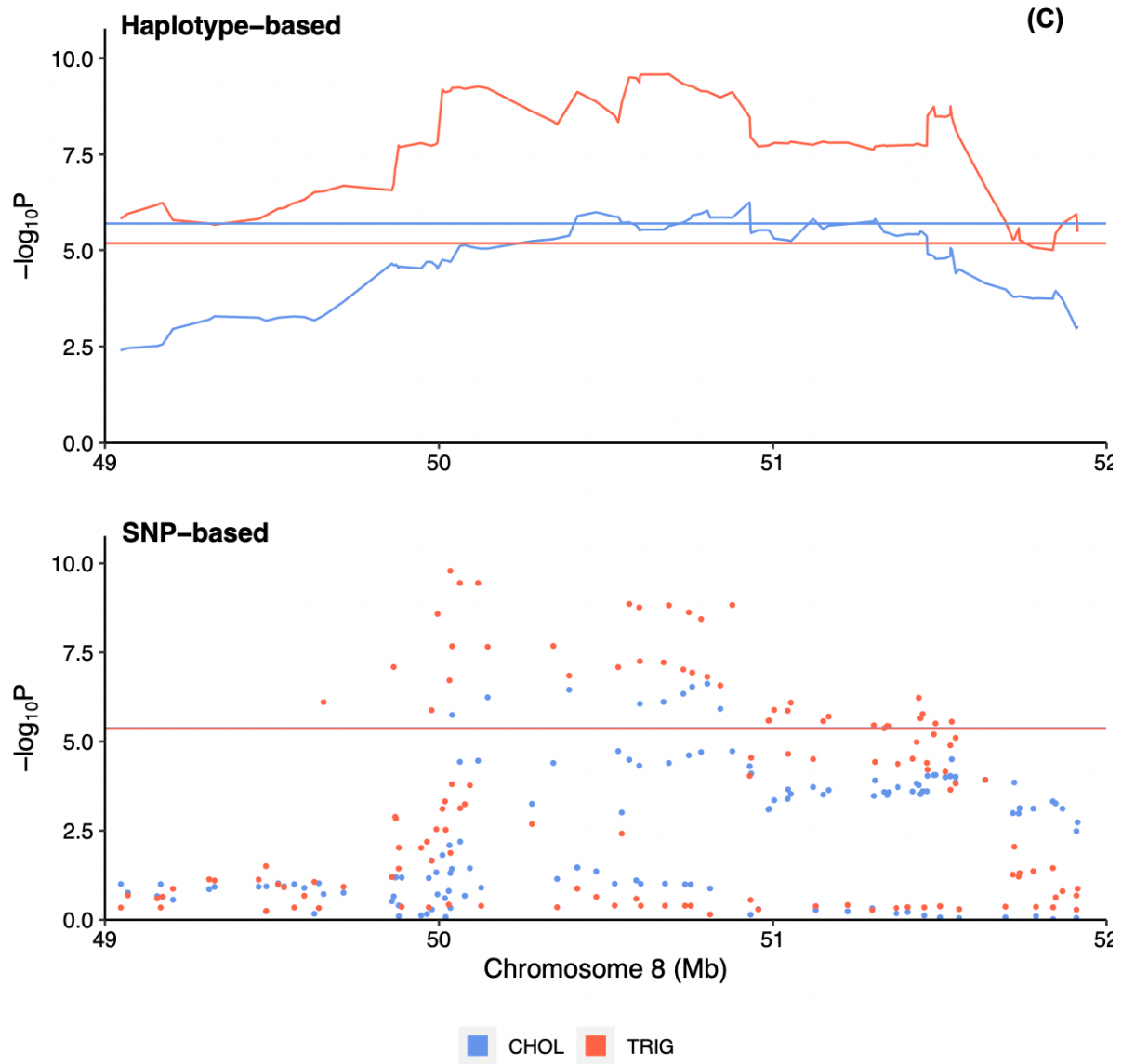


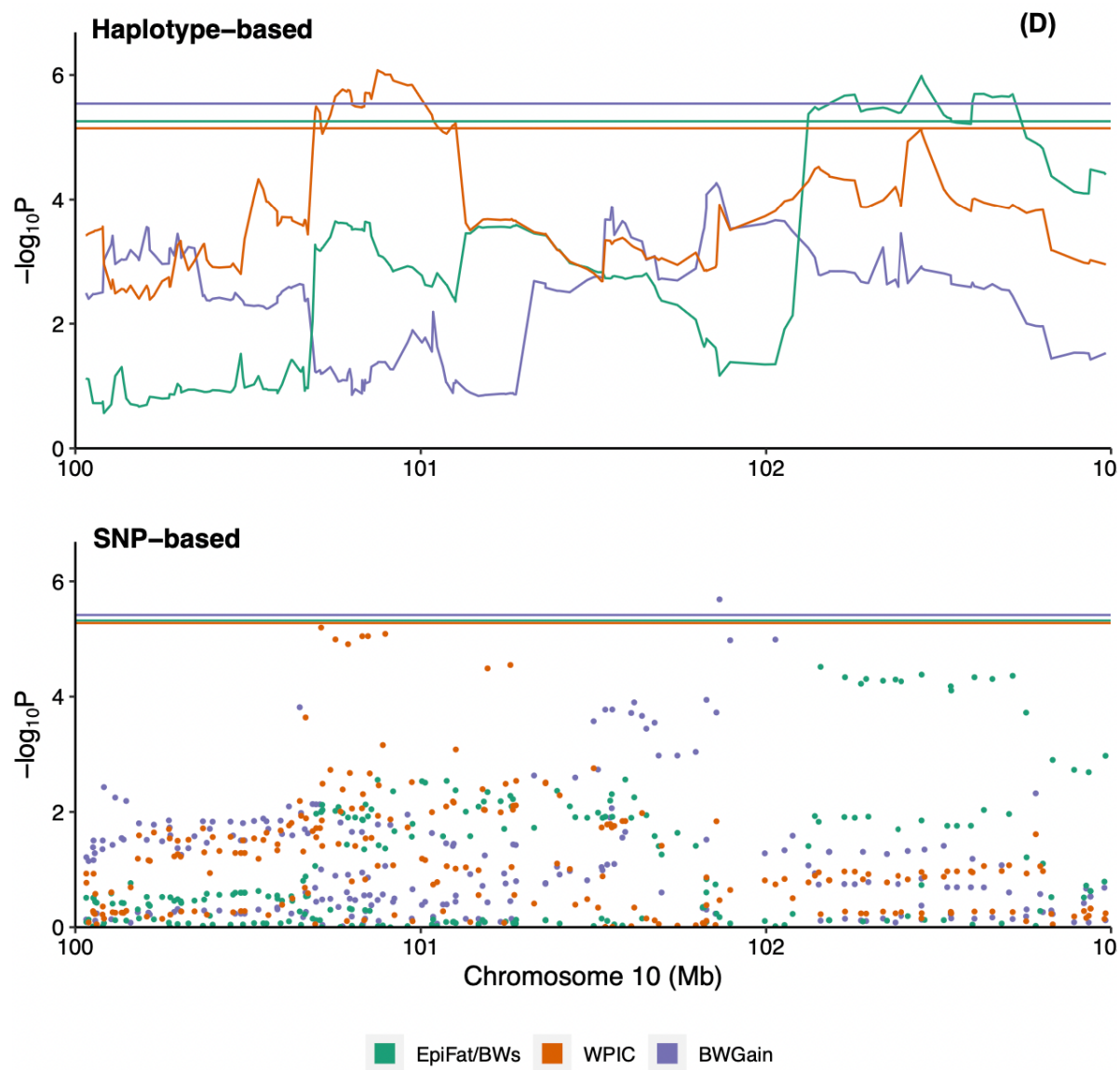
Supplementary. Figure 2 – Haplotype plots that are zoomed in for pQTLs that are **likely pleiotropic** (A-F) for multiple physiological traits: (A) pQTLs on Chr1:180Mb for TRIG, EpiFat/BW and RetroFat/BW; (B) pQTLs on Chr6:27Mb for CHOL, TRIG and RetroFat/BW; (C) pQTLs on Chr8:50Mb for CHOL and TRIG; (D) pQTLs on Chr10:101Mb for WPIC and EpiFat/BW; (E) pQTLs on Chr16:17Mb for BW and RetroFat/BW; (F) pQTLs on Chr19:52Mb for BW, BLNoTail and EpiFat.

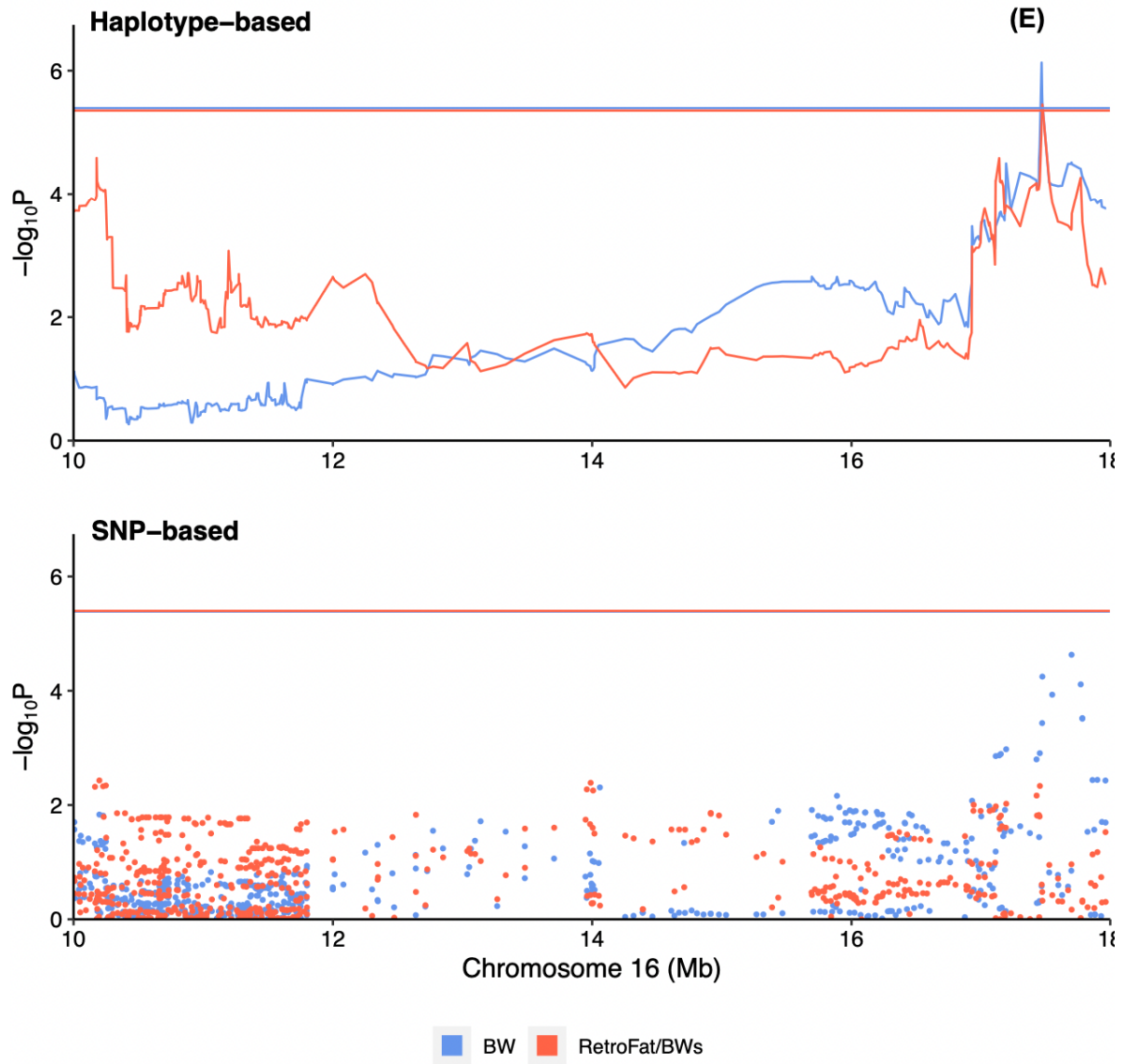
Haplotype plots that are zoomed in for pQTLs that are **unlikely pleiotropic** (D, G) for multiple physiological traits: (D) pQTLs on Chr10:101Mb for BWGain versus WPIC and EpiFat/BW; (G) pQTLs on Chr20:6-8Mb for TotKid/BW and EpiFat/BW.

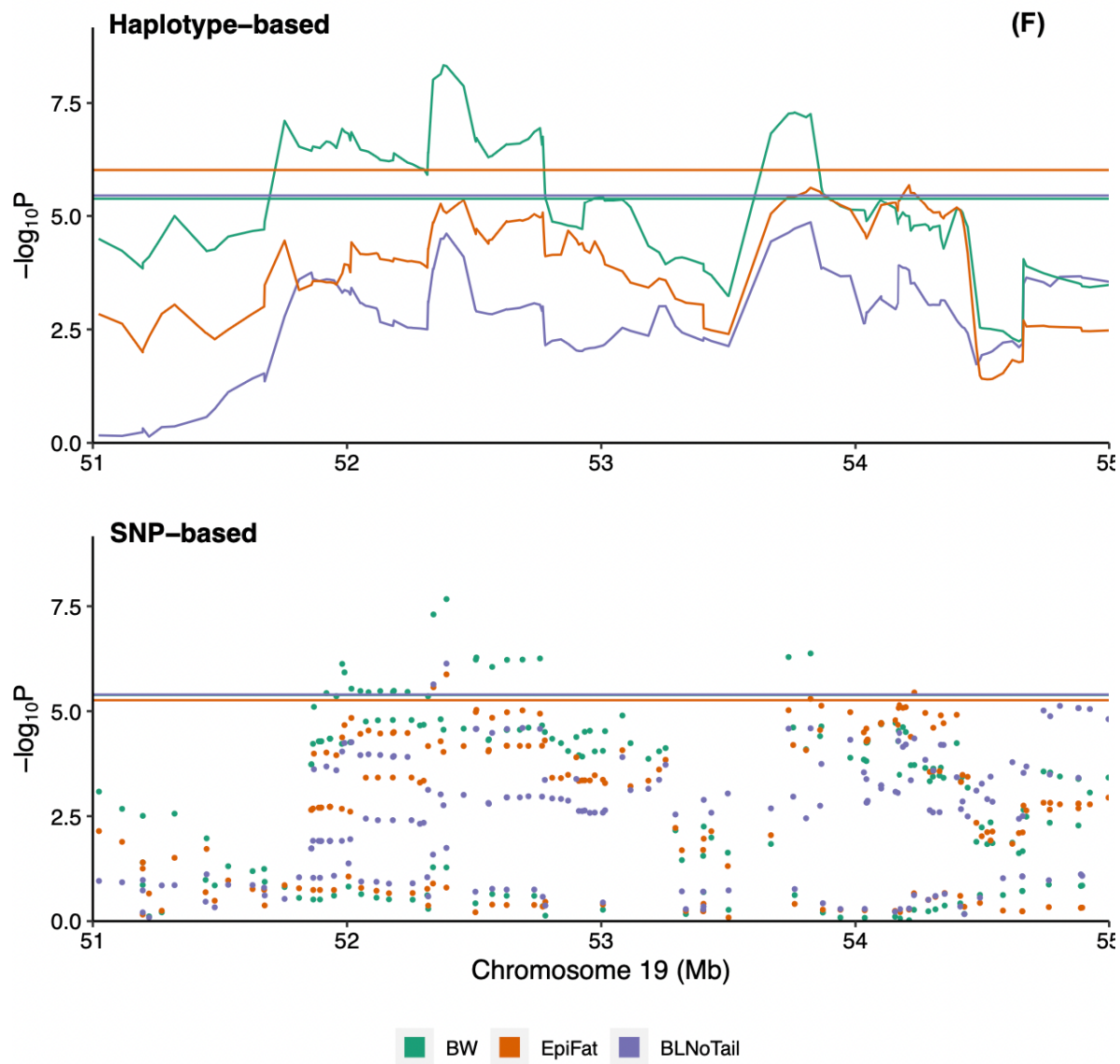


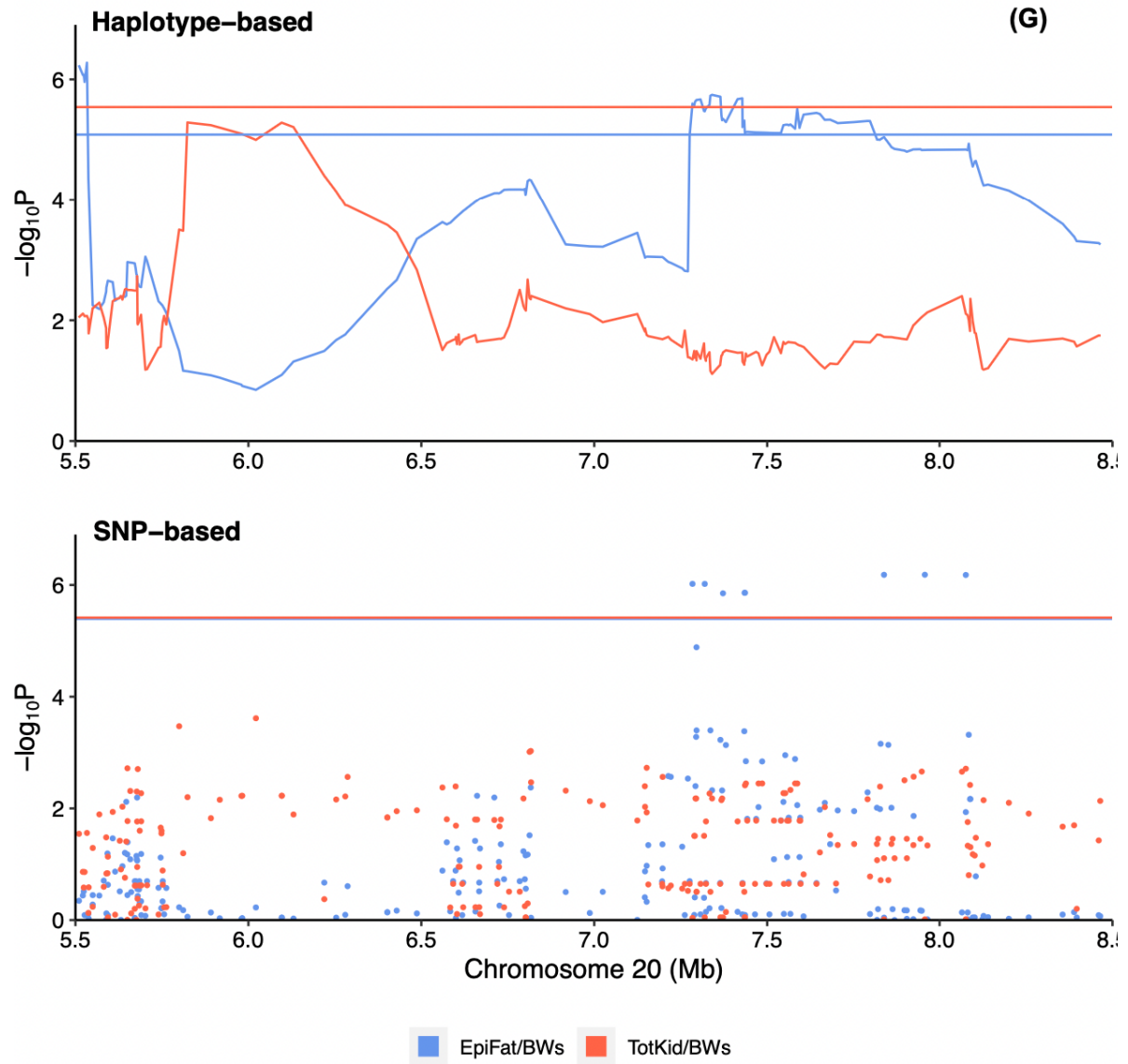




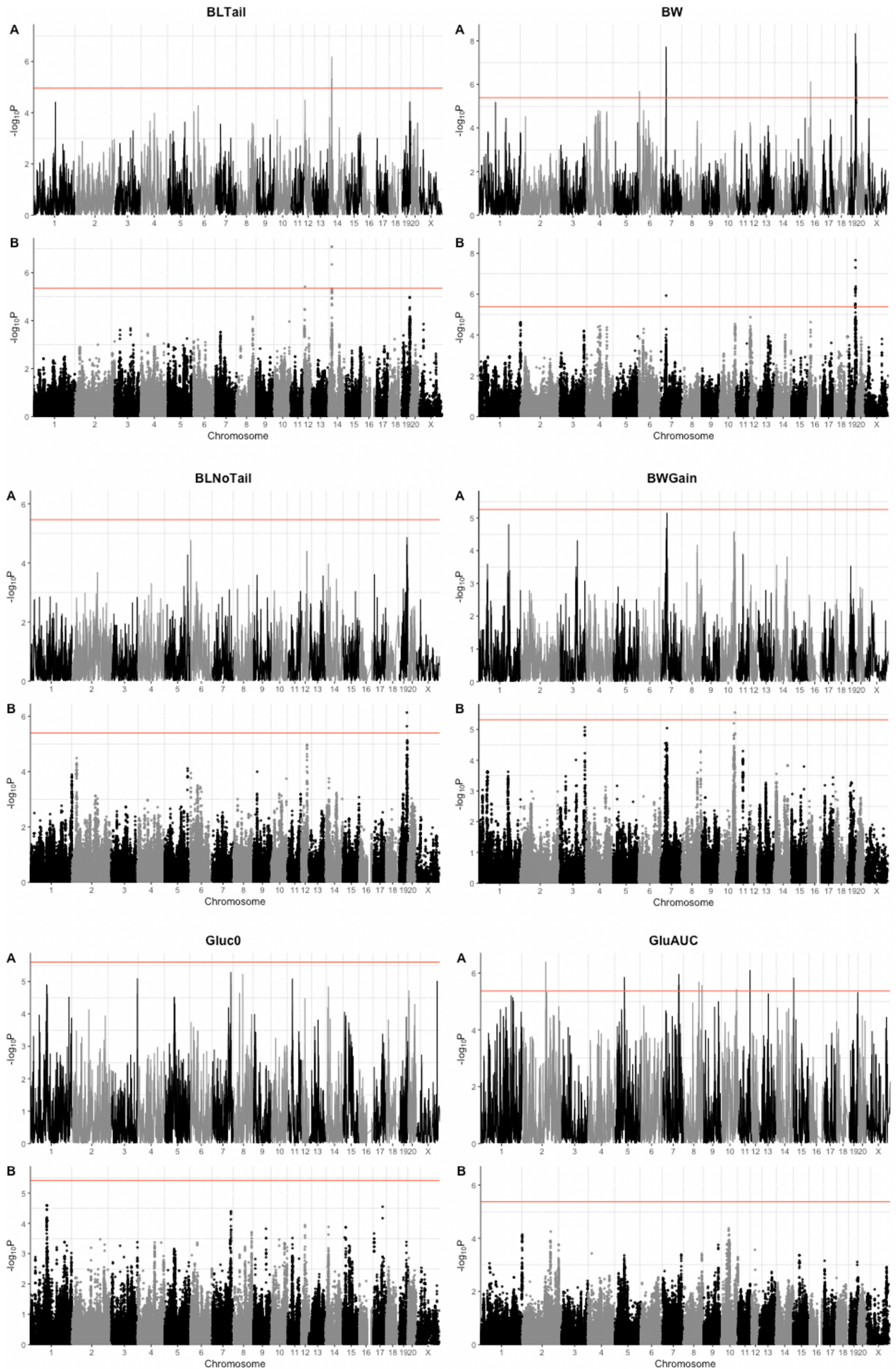


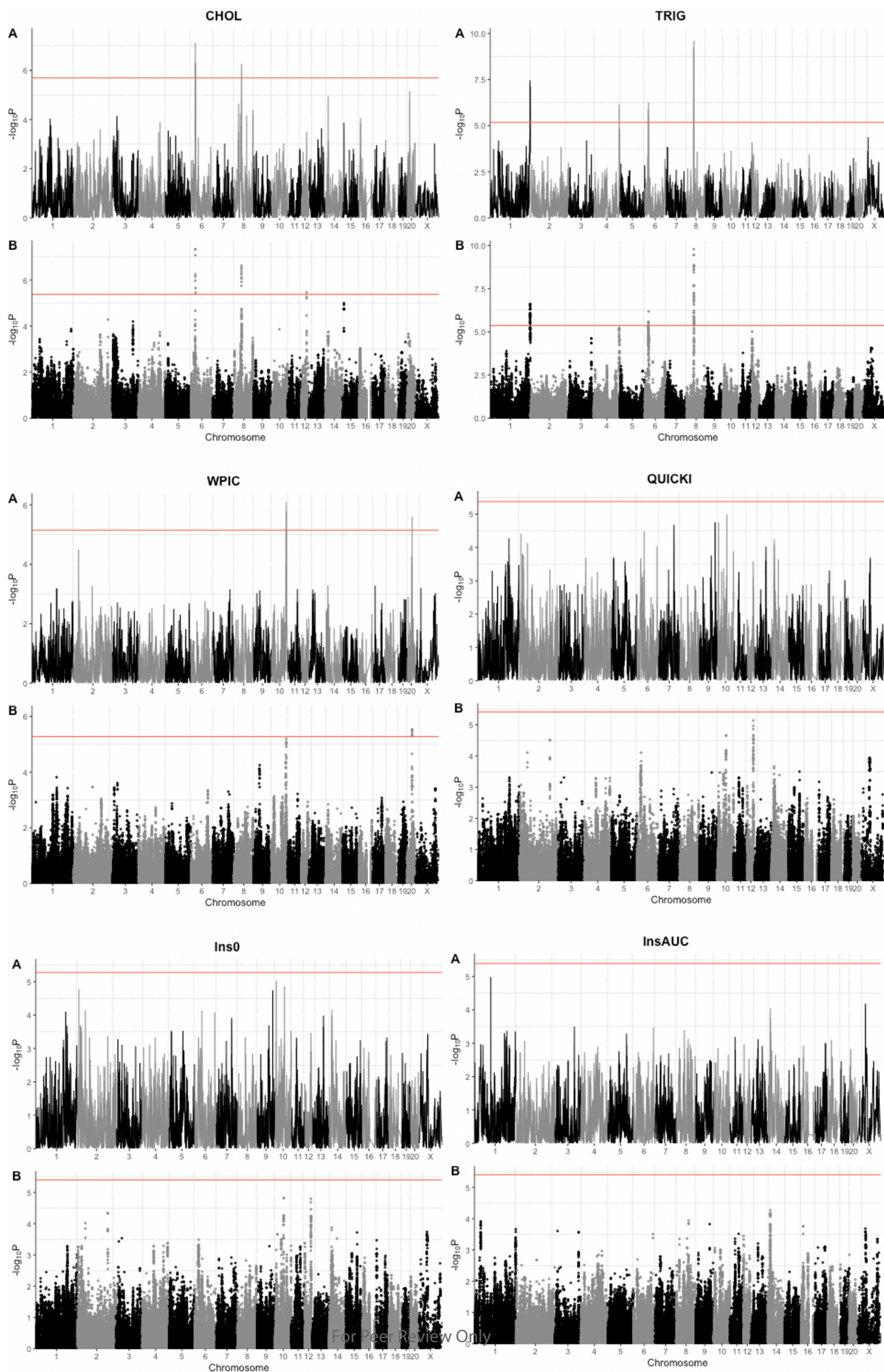


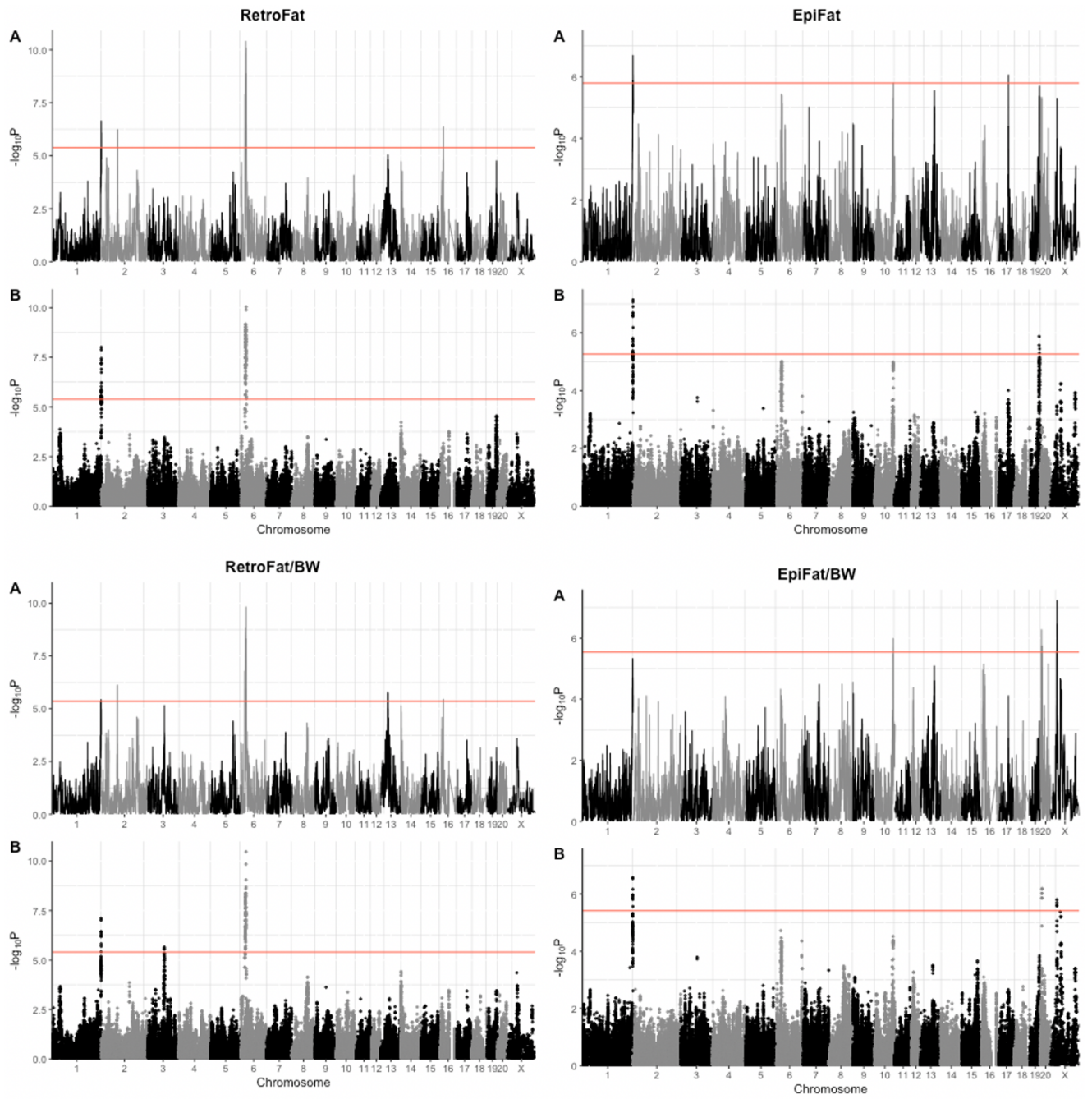


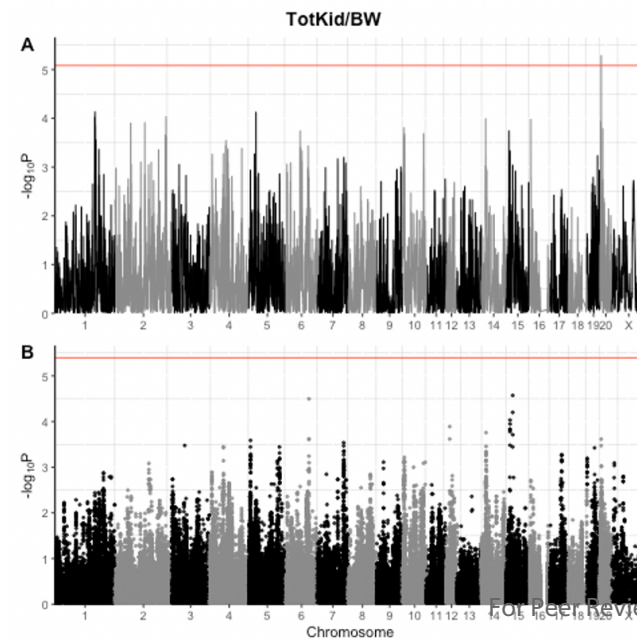
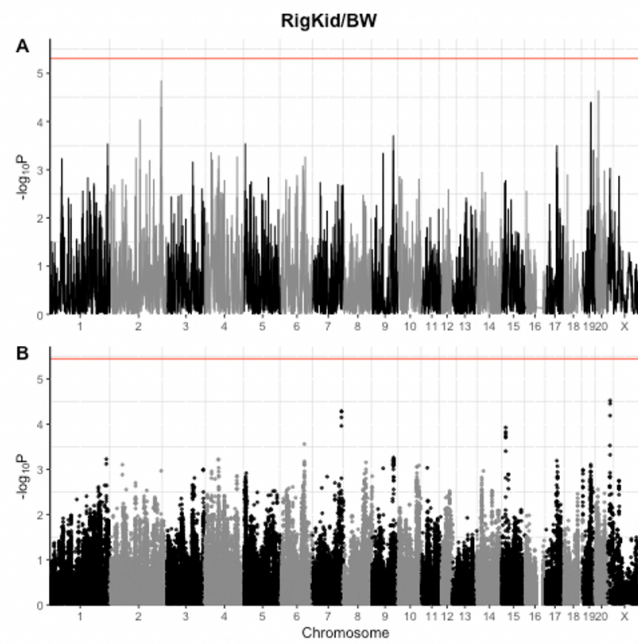
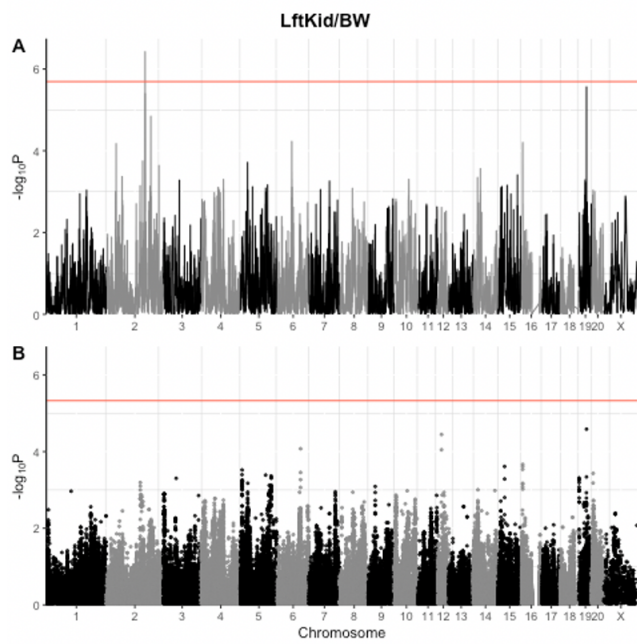
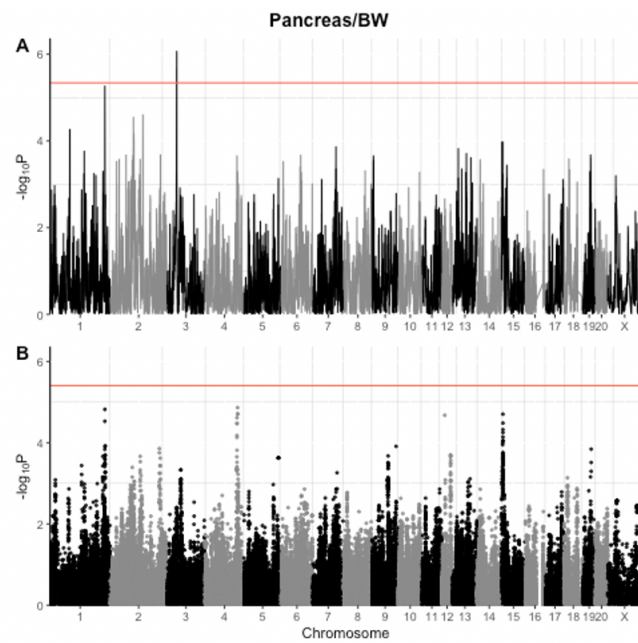
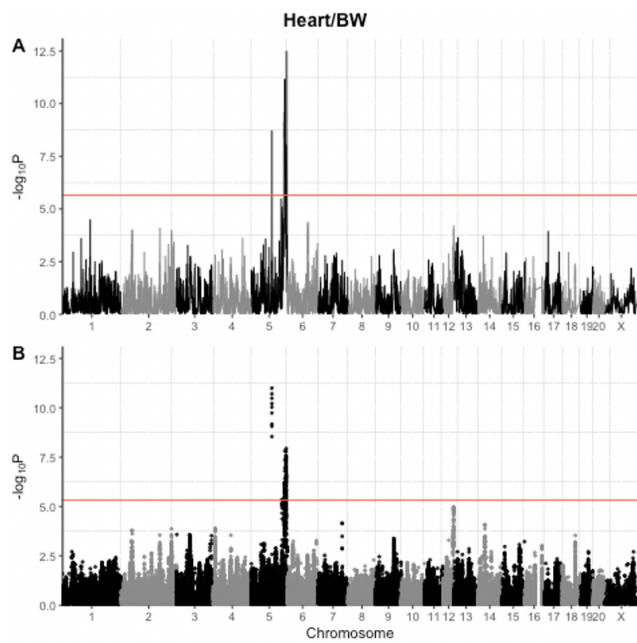


Supplementary. Figure 3 - Manhattan plots for physiological traits using (A) haplotype-based or (B) SNP-based mixed models. The x-axis shows genomic position and y-axis the significance as negative log 10 of the p-value of the test of association. Thresholds are shown as red horizontal lines and indicate the genome-wide 10% thresholds as determined by permutation in haplotype and bootstraps in SNP-based method.









Supplement Table 1. Summary of phen

Abb	Phenotype
BW	Body weight
BWGain	Body Weight Gained
BLTail	Body Length Tail
BLNoTail	Body length No Tail
EpiFat	EpiFat
EpiFat/BW	Adjusted EpiFat
RetroFat	RetroFat
RetroFat/BW	Adjusted RetroFat
QUICKI	QUICKI
Ins0	Fasting Insulin
InsAUC	Insulin AUC
Gluc0	Fasting Glucose
GluAUC	Glucose AUC
CHOL	Fasting Cholesterol
TRIG	Fasting Triglyceride
WPIC	Pancreas Insulin Content
Pancreas/BW	Pancreas Weight/sacBW
Heart/BW	Heart Weight/sacBW
RigKid/BW	Right Kidney/sacBW
LftKid/BW	Left Kidney/sacBW
TotKid/BW	Total Kidney/sacBW

Tissue	Number of rats
Liver	430
Adipose	415

phenotypes, RNASEQ and transformation, covariates

Description	Unit
Body weight at Insulin test at 16 weeks of age	grams (g)
Body weight gain from 16 weeks of age until sacrifice at 17 weeks of age	grams (g)
Body length with tail at sacrifice	centimeter (cm)
Body length without tail at sacrifice	centimeter (cm)
Epididymal fat pad weight	grams (g)
Epididymal fat pad weight/body weight at sacrificed	fraction (g/g)
Retroperitoneal fat pad weight	grams (g)
Retroperitoneal fat pad weight/body weight at sacrificed	fraction (g/g)
Quantitative insulin sensitive check	$1/[\log(\text{fasting insulin})]$
Fasting Insulin	ng/ml
Insulin under the curve	Area under the curve
Fasting Glucose	mg/dL
Glucose under the curve	Area under the curve
Fasting Cholesterol	mg/dL
Fasting Triglyceride	mg/dL
Whole pancreas insulin content	ug/g
Pancreas weight/body weight at sacrifice	fraction (g/g)
Heart weight/body weight at sacrifice	fraction (g/g)
Right kidney weight/body weight at sacrificed	fraction (g/g)
Left kidney weight/body weight at sacrificed	fraction (g/g)
Both kidney weight/body weight at sacrifice	fraction (g/g)

Sequenced	Transformation
37 kb paired end	RINT
75 kb single end	RINT

Number.of.rats	Transformation	Covariates	Heritability(SE)
1519	RINT	NA	0.54 (0.036)
1142	RINT	NA	0.18 (0.038)
1134	RINT	Dissector	0.38 (0.042)
1134	RINT	Dissector	0.22 (0.039)
1141	RINT	Dissector	0.58 (0.037)
1141	RINT	Dissector	0.6 (0.038)
1141	RINT	NA	0.6 (0.037)
1142	RINT	NA	0.58 (0.039)
1400	RINT	Handler	0.32 (0.04)
1400	RINT	number,Handler	0.31 (0.04)
1370	RINT	Bleeder,Injector	0.29 (0.039)
1517	RINT	Color,Handler	0.35 (0.037)
1514	TRINT	number	0.36 (0.037)
1137	log	HarvestNumber	0.44 (0.044)
1137	log	NA	0.42 (0.045)
1003	RINT	NA	0.31 (0.053)
1127	RINT	NA	0.51 (0.042)
979	RINT	NA	0.43 (0.046)
373	RINT	NA	0.32 (0.086)
374	RINT	NA	0.37 (0.087)
372	RINT	NA	0.48 (0.089)

Covariates	B-H FDR
batch, RIN, first PC from expression, first 10 PCs from ge	0.00024
batch, nerve, muscle, first PC from expression, first 10 P	0.00028

Supplement Table 2. Raw phenotype

Rat ID	Family	Tissue.Harvest.Age	Color	Handler
41736_3		21 17weeks	Black	Murielle
41761_4		7 17weeks	NA	Murielle
41761_5		7 17weeks	NA	Murielle
41762_3		16 17weeks	Black	Murielle
41762_4		16 17weeks	Black	Murielle
41762_5		16 17weeks	Black	Murielle
41763_1		15 17weeks	Black	Murielle
41763_2		15 17weeks	Black	Murielle
41763_3		15 17weeks	Black	Murielle
41767_3		11 17weeks	Black.Hood	Murielle
41767_4		11 17weeks	Black	Murielle
41770_3		8 17weeks	Black	Murielle
41770_4		8 17weeks	Albino	Murielle
41770_5		8 17weeks	Black.Hood	Murielle
41770_6		8 17weeks	Black.Hood	Murielle
41774_3		9 17weeks	Brown.Hood	Murielle
41774_4		9 17weeks	Brown	Murielle
41774_5		9 17weeks	Brown.Hood	Murielle
41774_6		9 17weeks	Brown.Hood	Murielle
41776_3		13 17weeks	Black	Murielle
41776_4		13 17weeks	Black	Murielle
41776_5		13 17weeks	Black	Murielle
41776_6		13 17weeks	Black	Murielle
41777_1		12 17weeks	Albino	Murielle
41777_2		12 17weeks	Black.Hood	Murielle
41779_3		14 17weeks	Black	Murielle
41779_4		14 17weeks	Albino	Murielle
41779_5		14 17weeks	Black	Murielle
41779_6		14 17weeks	Albino	Murielle
41816_1		16 17weeks	Black	Murielle
41816_2		16 17weeks	Black	Murielle
41816_3		16 17weeks	Brown	Murielle
42114_1		4 17weeks	Brown	Murielle
42114_2		4 17weeks	Black	Murielle
42275_2		3 17weeks	Black.Hood	Murielle
42276_1		20 17weeks	Black.Hood	Murielle
42276_2		20 17weeks	Brown.Hood	Murielle
42414_1		1 17weeks	Brown.Hood	Murielle
42414_2		1 17weeks	Black.Hood	Murielle
42607_1		10 17weeks	Albino	Murielle
42607_3		10 17weeks	Black	Murielle
42610_1		7 17weeks	Black.Hood	Nancy
42610_2		7 17weeks	Black	Nancy

42610_3	7 17weeks	Black.Hood	Nancy
42610_4	7 17weeks	Black	Nancy
42610_5	7 17weeks	Black.Hood	Nancy
42610_7	7 17weeks	Black.Hood	Nancy
42706_1	5 17weeks	Black	Max
42706_2	5 17weeks	Black.Hood	Max
42706_3	5 17weeks	Black.Hood	Max
42804_1	12 17weeks	Black.Hood	Max
42804_2	12 17weeks	Black.Hood	Max
43054_1	16 17weeks	Brown	Max
43054_3	16 17weeks	Brown	Max
43054_4	16 17weeks	Black	Max
43056_1	13 17weeks	Black	Max
43056_2	13 17weeks	Black	Max
43057_1	4 17weeks	Black	Max
43057_2	4 17weeks	Brown	Max
43057_4	4 17weeks	Brown	Max
43852_1	21 17weeks	Black	Nancy
43855_1	5 17weeks	Black	Nancy
43855_2	5 17weeks	Black.Hood	Nancy
43856_1	4 17weeks	Brown	Nancy
43860_1	13 17weeks	Black	Nancy
43860_2	13 17weeks	Black	Nancy
43861_1	15 17weeks	Black.Hood	Nancy
43861_2	15 17weeks	Brown.Hood	Nancy
43861_3	15 17weeks	Black	Nancy
43861_4	15 17weeks	Black.Hood	Nancy
43875_3	2 17weeks	Black	Jaime
43879_1	9 17weeks	Brown	Nancy
43879_2	9 17weeks	Brown.Hood	Nancy
43879_3	9 17weeks	Brown	Nancy
43880_1	10 17weeks	Albino	Nancy
43880_3	10 17weeks	Brown	Nancy
43880_4	10 17weeks	Black.Hood	Nancy
43889_3	21 17weeks	Black	Nancy
43986_1	16 17weeks	Brown	Jaime
43986_2	16 17weeks	Black	Jaime
43988_3	14 17weeks	Albino	Jaime
43988_4	14 17weeks	Black.Hood	Jaime
44077_3	5 17weeks	Black	Jaime
44077_4	5 17weeks	Black.Hood	Jaime
44080_3	4 17weeks	Black	Jaime
44080_4	4 17weeks	Brown	Jaime
44787_1	8 17weeks	Black.Hood	Nancy
44789_1	12 17weeks	Black.Hood	Nancy
44789_2	12 17weeks	Black.Hood	Nancy

44790_1	14 17weeks	Black	Nancy
44790_2	14 17weeks	Albino	Nancy
44791_3	6 17weeks	Brown	Nancy
44792_1	2 17weeks	Brown	Nancy
44935_1	11 17weeks	Black	Nancy
44938_1	3 17weeks	Black	Nancy.Jaime
44939_1	17 17weeks	Brown.Hood	Nancy.Jaime
44940_1	18 17weeks	Black.Hood	Nancy.Jaime
44940_2	18 17weeks	Brown.Hood	Nancy.Jaime
45337_2	19 17weeks	Brown.Hood	Nancy.Jaime
45338_1	22 17weeks	Black.Hood	Nancy.Jaime
45338_2	22 17weeks	Black.Hood	Nancy.Jaime
45340_1	1 17weeks	Black.Hood	Nancy.Jaime
45597_3	25 17weeks	Brown	Nancy
45600_1	24 17weeks	Brown	Nancy
45610_1	30 17weeks	Brown	Nancy
45610_2	30 17weeks	Black	Nancy
45921_3	27 17weeks	Black	Nancy
45925_3	31 17weeks	Black	Nancy
45925_4	31 17weeks	Black.Hood	Nancy
46692_1	35 17weeks	Black.Hood	Nancy
46693_1	36 17weeks	Brown.Hood	Nancy
46694_1	37 17weeks	Brown.Hood	Nancy
46694_2	37 17weeks	Black.Hood	Nancy
46695_2	38 17weeks	Brown.Hood	Nancy
46698_1	39 17weeks	Black.Hood	Nancy.Jaime
46698_2	39 17weeks	Black.Hood	Nancy.Jaime
46703_1	41 17weeks	Brown.Hood	Nancy.Jaime
46703_2	41 17weeks	Black.Hood	Nancy.Jaime
46969_1	42 17weeks	Brown	Nancy
46971_1	43 17weeks	Brown	Nancy.Jaime
46971_2	43 17weeks	Black	Nancy.Jaime
46971_4	43 17weeks	Brown	Nancy.Jaime
46972_1	44 17weeks	Brown	Nancy
47130_1	45 17weeks	Albino	Nancy
47131_1	46 17weeks	Black	Nancy
47133_1	47 17weeks	Albino	Nancy
47133_2	47 17weeks	Black	Nancy
47516_1	48 17weeks	Brown	Nancy
47516_2	48 17weeks	Black.Hood	Nancy
47517_1	49 17weeks	Black	Nancy
47517_2	49 17weeks	Black	Nancy
47518_1	50 17weeks	Brown	Nancy
47529_1	26 17weeks	Black.Hood	Nancy
47529_2	26 17weeks	Brown.Hood	Nancy
47821_1	32 17weeks	Brown.Hood	Nancy

47821_2	32 17weeks	Brown.Hood	Nancy
47825_1	34 17weeks	Brown	Nancy
47825_2	34 17weeks	Brown.Hood	Nancy
48491_1	43 17weeks	Brown	Nancy.Jaime
56269_3	59 17weeks	Brown	Katie
56269_4	59 17weeks	Black.Hood	Katie
56272_3	61 17weeks	Black.Hood	Katie
56272_4	61 17weeks	Black.Hood	Katie
56275_3	63 17weeks	Albino	Katie
56275_4	63 17weeks	Albino	Katie
56514_1	52 17weeks	Brown.Hood	Katie
56514_2	52 17weeks	Black.Hood	Katie
56522_2	53 17weeks	Black.Hood	Katie
57215_3	72 17weeks	Brown	Katie
57241_3	95 17weeks	Black.Hood	Katie
57241_4	95 17weeks	Albino	Katie
57241_5	95 17weeks	Black.Hood	Katie
57241_6	95 17weeks	Albino	Katie
57460_3	104 17weeks	Black	Katie
57460_4	104 17weeks	Black	Katie
57604_3	100 17weeks	Black.Hood	Jz
57604_4	100 17weeks	Black.Hood	Jz
57604_6	100 17weeks	Black.Hood	Jz
57636_3	111 17weeks	Albino	Jz
57636_4	111 17weeks	Albino	Jz
57637_3	110 17weeks	Black	Katie
57637_4	110 17weeks	Black	Jz
57810_3	86 17weeks	Albino	Jz
57810_4	86 17weeks	Albino	Jz
57909_3	81 17weeks	Albino	Jz
57909_4	81 17weeks	Black.Hood	Jz
57913_3	84 17weeks	Brown.Hood	Katie
57913_5	84 17weeks	Brown.Hood	Katie
57913_6	84 17weeks	Black.Hood	Katie
57914_3	91 17weeks	Black.Hood	Jz
57914_4	91 17weeks	Black.Hood	Jz
57914_5	91 17weeks	Black.Hood	Jz
57914_6	91 17weeks	Black.Hood	Jz
58041_3	92 17weeks	Black.Hood	Katie
58041_4	92 17weeks	Black.Hood	Katie
58041_5	92 17weeks	Black.Hood	Katie
58041_6	92 17weeks	Black.Hood	Katie
58095_3	94 17weeks	Black.Hood	Jz
58095_4	94 17weeks	Black	Jz
58096_3	93 17weeks	Albino	Katie
58096_4	93 17weeks	Black.Hood	Katie

58096_5	93 17weeks	Black.Hood	Katie
58096_6	93 17weeks	Black.Hood	Katie
58096_7	93 17weeks	Black.Hood	Katie
58096_8	93 17weeks	Black.Hood	Katie
58105_3	65 17weeks	Brown	Katie
58105_4	65 17weeks	Black	Katie
58121_3	61 17weeks	Black.Hood	Katie
58121_4	61 17weeks	Black.Hood	Katie
58122_4	63 17weeks	Albino	Katie
58125_3	70 17weeks	Black	Katie
58125_4	70 17weeks	Black.Hood	Katie
58293_3	62 17weeks	Black.Hood	Katie
58293_4	62 17weeks	Black.Hood	Katie
58294_3	66 17weeks	Black	Katie
58294_4	66 17weeks	Albino	Katie
58295_4	67 17weeks	Brown.Hood	Katie
58301_3	73 17weeks	Brown	Katie
58301_4	73 17weeks	Brown.Hood	Katie
58337_3	57 17weeks	Brown.Hood	Katie
58337_4	57 17weeks	Albino	Katie
58342_3	69 17weeks	Black.Hood	Katie
58343_4	71 17weeks	Brown.Hood	Katie
58564_3	56 17weeks	Black	Katie
58564_4	56 17weeks	Black.Hood	Katie
58566_3	58 17weeks	Black	Katie
58566_4	58 17weeks	Black.Hood	Katie
58570_3	74 17weeks	Brown.Hood	Katie
58570_4	74 17weeks	Black.Hood	Katie
58572_4	60 17weeks	Black.Hood	Katie
58765_3	55 17weeks	Brown.Hood	Katie
58765_4	55 17weeks	Brown	Katie
58769_3	61 17weeks	Black.Hood	Katie
58769_4	61 17weeks	Black.Hood	Katie
58771_3	64 17weeks	Black	Katie
58771_4	64 17weeks	Black.Hood	Katie
58774_4	68 17weeks	Brown.Hood	Katie
58779_3	76 17weeks	Black	Katie
58779_4	76 17weeks	Black.Hood	Katie
59104_3	54 17weeks	Brown.Hood	Katie
59104_4	54 17weeks	Black.Hood	Katie
59108_3	66 17weeks	Black	Katie
59108_4	66 17weeks	Albino	Katie
59109_3	67 17weeks	Brown.Hood	Katie
59109_4	67 17weeks	Brown.Hood	Katie
59114_3	75 17weeks	Black.Hood	Katie
59114_4	75 17weeks	Black	Katie

59114_5	75 17weeks	Black.Hood	Katie
59114_6	75 17weeks	Black	Katie
59535_3	96 17weeks	Brown	Jz
59535_4	96 17weeks	Brown	Jz
59535_5	96 17weeks	Brown	Jz
59535_6	96 17weeks	Brown	Jz
59962_3	87 17weeks	Albino	Jz
59962_5	87 17weeks	Brown.Hood	Jz
59962_6	87 17weeks	Brown.Hood	Jz
60209_3	92 17weeks	Black.Hood	Jz
60209_4	92 17weeks	Black.Hood	Jz
60209_5	92 17weeks	Black.Hood	Jz
60209_6	92 17weeks	Black.Hood	Jz
60213_3	106 17weeks	Black	Jz
60213_4	106 17weeks	Albino	Jz
60214_3	115 17weeks	Black	Jz
60214_5	115 17weeks	Black	Katie
60214_6	115 17weeks	Black.Hood	Katie
60444_3	104 17weeks	Black	Jz
60444_4	104 17weeks	Black.Hood	Jz
60444_5	104 17weeks	Black	Jz
60444_6	104 17weeks	Brown	Jz
60444_7	104 17weeks	Brown	Jz
60444_8	104 17weeks	Black.Hood	Jz
60445_3	112 17weeks	Black	Katie
60445_4	112 17weeks	Black.Hood	Katie
60445_5	112 17weeks	Black	Katie
60641_3	83 17weeks	Brown.Hood	Jz
60641_4	83 17weeks	Brown	Jz
60644_3	88 17weeks	Brown.Hood	Jz
60644_4	88 17weeks	Brown.Hood	Jz
60645_3	96 17weeks	Black	Jz
60645_4	96 17weeks	Black	Jz
60645_5	96 17weeks	Black	Jz
60645_6	96 17weeks	Brown	Jz
60650_3	77 17weeks	Albino	Jz
60650_4	77 17weeks	Albino	Jz
61038_3	87 17weeks	Brown	Jz
61038_4	87 17weeks	Brown.Hood	Jz
61038_5	87 17weeks	Albino	Jz
61038_6	87 17weeks	Brown.Hood	Jz
61040_3	95 17weeks	Black	Jz
61040_4	95 17weeks	Albino	Jz
61040_5	95 17weeks	Black	Jz
61040_6	95 17weeks	Albino	Jz
61041_3	99 17weeks	Albino	Jz

61041_4	99 17weeks	Black.Hood	Jz
61158_3	79 17weeks	Albino	Jz
61158_4	79 17weeks	Black.Hood	Jz
61160_3	89 17weeks	Black	Jz
61160_4	89 17weeks	Brown.Hood	Jz
61162_3	91 17weeks	Black.Hood	Jz
61162_4	91 17weeks	Black.Hood	Jz
61163_3	98 17weeks	Black	Jz
61163_4	98 17weeks	Brown	Jz
61172_3	112 17weeks	Black	Jz
61172_4	112 17weeks	Black.Hood	Jz
61357_4	82 17weeks	Black.Hood	Jz
61638_3	78 17weeks	Brown.Hood	Jz
61638_4	78 17weeks	Brown.Hood	Jz
61638_5	78 17weeks	Brown.Hood	Jz
61638_6	78 17weeks	Brown.Hood	Jz
61641_3	88 17weeks	Brown	Jz
61641_4	88 17weeks	Black	Jz
61643_3	94 17weeks	Brown	Jz
61643_4	94 17weeks	Black	Jz
61643_5	94 17weeks	Brown	Jz
61643_6	94 17weeks	Black.Hood	Jz
61644_3	96 17weeks	Black	Katie
61644_4	96 17weeks	Brown	Katie
61645_3	100 17weeks	Black.Hood	Jz
61645_4	100 17weeks	Black.Hood	Jz
61646_3	111 17weeks	Albino	Jz
61646_4	111 17weeks	Albino	Jz
61821_3	90 17weeks	Black.Hood	Katie
61821_4	90 17weeks	Brown.Hood	Katie
61821_6	90 17weeks	Brown.Hood	Katie
62035_3	84 17weeks	Brown.Hood	Katie
62035_4	84 17weeks	Black.Hood	Katie
62043_3	109 17weeks	Brown.Hood	Katie
62043_4	109 17weeks	Black	Katie
62044_3	112 17weeks	Black	Katie
62044_4	112 17weeks	Black.Hood	Katie
62044_5	112 17weeks	Black	Katie
62046_3	77 17weeks	Albino	Katie
62046_4	77 17weeks	Brown.Hood	Katie
62288_3	80 17weeks	Black	Katie
62288_4	80 17weeks	Black.Hood	Katie
62288_5	80 17weeks	Black	Katie
62288_6	80 17weeks	Black.Hood	Katie
62289_3	81 17weeks	Black.Hood	Katie
62289_4	81 17weeks	Albino	Katie

62293_3	89 17weeks	Brown.Hood	Katie
62293_4	89 17weeks	Brown	Katie
62295_3	98 17weeks	Brown	Katie
62295_4	98 17weeks	Black	Katie
62296_3	114 17weeks	Brown.Hood	Katie
62296_4	114 17weeks	Black	Katie
62298_3	85 17weeks	Albino	Katie
62298_4	85 17weeks	Brown.Hood	Katie
62302_3	108 17weeks	Brown	Katie
62302_4	108 17weeks	Brown.Hood	Katie
62305_4	116 17weeks	Brown.Hood	Jaime
62305_5	116 17weeks	Black.Hood	Jaime
62309_3	86 17weeks	Albino	Jaime
62309_4	86 17weeks	Brown	Jaime
62310_4	90 17weeks	Black.Hood	Jaime
62312_3	97 17weeks	Brown	Jaime
62312_4	97 17weeks	Brown.Hood	Jaime
62314_3	81 17weeks	Albino	Katie
62314_4	81 17weeks	Black.Hood	Katie
62315_3	83 17weeks	Black.Hood	Jaime
62315_4	83 17weeks	Brown.Hood	Jaime
62316_3	88 17weeks	Black	Jaime
62316_4	88 17weeks	Black	Jaime
62317_3	89 17weeks	Black	Jaime
62317_4	89 17weeks	Brown.Hood	Jaime
62318_3	91 17weeks	Black.Hood	Katie
62318_4	91 17weeks	Black.Hood	Katie
62320_3	105 17weeks	Brown.Hood	Katie
62320_4	105 17weeks	Black	Jaime
62321_3	106 17weeks	Black	Jaime
62321_4	106 17weeks	Black.Hood	Jaime
62322_3	107 17weeks	Albino	Katie
62322_4	107 17weeks	Brown.Hood	Katie
62322_5	107 17weeks	Brown.Hood	Katie
62322_6	107 17weeks	Brown.Hood	Katie
62323_3	113 17weeks	Brown	Katie
62323_4	113 17weeks	Brown.Hood	Katie
62324_5	114 17weeks	Brown.Hood	Katie
62324_6	114 17weeks	Black.Hood	Katie
62327_3	79 17weeks	Albino	Katie
62327_4	79 17weeks	Brown.Hood	Katie
62329_3	85 17weeks	Albino	Katie
62329_4	85 17weeks	Black.Hood	Katie
62333_3	98 17weeks	Black	Katie
62333_4	98 17weeks	Black.Hood	Katie
62334_3	100 17weeks	Black.Hood	Katie

62334_4	100 17weeks	Black.Hood	Katie
62335_3	108 17weeks	Brown	Katie
62335_4	108 17weeks	Brown.Hood	Katie
62335_5	108 17weeks	Brown	Jaime
62335_6	108 17weeks	Brown.Hood	Jaime
62337_3	111 17weeks	Albino	Katie
62337_4	111 17weeks	Albino	Katie
62338_3	116 17weeks	Black.Hood	Katie
62338_4	116 17weeks	Black.Hood	Katie
62339_3	84 17weeks	Black.Hood	Jaime
62339_4	84 17weeks	Brown.Hood	Jaime
62339_5	84 17weeks	Black.Hood	Jaime
62339_6	84 17weeks	Brown.Hood	Jaime
62341_4	90 17weeks	Brown.Hood	Jaime
62343_3	96 17weeks	Brown	Jaime
62343_4	96 17weeks	Black	Jaime
62345_3	101 17weeks	Brown.Hood	Jaime
62345_4	101 17weeks	Albino	Jaime
62347_3	110 17weeks	Brown	Jaime
62347_4	110 17weeks	Black	Jaime
62347_5	110 17weeks	Brown	Jaime
62347_6	110 17weeks	Black	Jaime
62348_3	112 17weeks	Black	Jaime
62348_4	112 17weeks	Black.Hood	Jaime
62349_3	77 17weeks	Albino	Jaime
62349_4	77 17weeks	Black.Hood	Jaime
62349_5	77 17weeks	Albino	Jaime
62349_6	77 17weeks	Albino	Jaime
62352_3	118.5 17weeks	Black.Hood	Katie
62352_4	118.5 17weeks	Albino	Katie
62360_3	128 17weeks	Albino	Katie
62360_4	128 17weeks	Brown	Katie
62360_5	128 17weeks	Albino	Katie
62360_6	128 17weeks	Black.Hood	Katie
62365_3	97 17weeks	Brown.Hood	Katie
62365_4	97 17weeks	Brown	Katie
62372_3	79 17weeks	Albino	Katie
62372_4	79 17weeks	Brown.Hood	Katie
62378_3	105 17weeks	Black.Hood	Katie
62378_4	105 17weeks	Brown.Hood	Katie
62378_5	105 17weeks	Brown.Hood	Katie
62378_6	105 17weeks	Brown	Katie
62380_3	109 17weeks	Brown.Hood	Katie
62380_4	109 17weeks	Black	Katie
62380_5	109 17weeks	Brown	Katie
62381_3	113 17weeks	Brown	Katie

62381_4	113 17weeks	Black.Hood	Katie
62381_5	113 17weeks	Brown	Katie
62381_6	113 17weeks	Black.Hood	Katie
62383_3	130 17weeks	Brown	Katie
62397_3	145 17weeks	Brown	Katie
62397_4	145 17weeks	Albino	Katie
62407_3	80 17weeks	Black	Katie
62407_4	80 17weeks	Black.Hood	Katie
62407_5	80 17weeks	Black.Hood	Katie
62407_6	80 17weeks	Black	Katie
62408_3	85 17weeks	Albino	Katie
62408_4	85 17weeks	Brown.Hood	Katie
62411_3	94 17weeks	Black	Katie
62411_4	94 17weeks	Brown.Hood	Katie
62411_5	94 17weeks	Brown.Hood	Katie
62411_6	94 17weeks	Brown	Katie
62414_3	99 17weeks	Brown	Katie
62414_4	99 17weeks	Albino	Katie
62414_5	99 17weeks	Brown	Katie
62414_6	99 17weeks	Black	Katie
62415_3	102 17weeks	Brown.Hood	Katie
62415_4	102 17weeks	Brown	Katie
62417_3	116 17weeks	Brown.Hood	Katie
62417_4	116 17weeks	Black.Hood	Katie
62418_3	154 17weeks	Brown	Katie
62418_4	154 17weeks	Brown.Hood	Katie
62420_3	156 17weeks	Black	Katie
62420_4	156 17weeks	Albino	Katie
62422_3	158 17weeks	Brown.Hood	Katie
62422_4	158 17weeks	Brown	Katie
62425_3	161 17weeks	Black.Hood	Katie
62425_4	161 17weeks	Black.Hood	Katie
62426_3	162 17weeks	Black.Hood	Katie
62426_4	162 17weeks	Black.Hood	Katie
62432_3	103 17weeks	Black	Katie
62432_4	103 17weeks	Brown	Katie
62434_3	89 17weeks	Brown.Hood	Katie
62434_4	89 17weeks	Brown	Katie
62436_3	97 17weeks	Brown	Katie
62436_4	97 17weeks	Brown.Hood	Katie
62437_3	91 17weeks	Black.Hood	Katie
62437_4	91 17weeks	Black.Hood	Katie
62438_3	101 17weeks	Brown	Katie
62438_5	101 17weeks	Brown	Katie
62443_3	83 17weeks	Black	Katie
62443_4	83 17weeks	Brown.Hood	Katie

62448_3	107 17weeks	Albino	Katie
62448_4	107 17weeks	Brown.Hood	Katie
62449_3	109 17weeks	Brown	Katie
62449_4	109 17weeks	Black.Hood	Katie
62463_3	112 17weeks	Black	Katie
62463_4	112 17weeks	Black.Hood	Katie
62463_5	112 17weeks	Black.Hood	Katie
62463_6	112 17weeks	Black.Hood	Katie
62471_3	111 17weeks	Albino	Katie
62471_4	111 17weeks	Albino	Katie
62474_3	121 17weeks	Black.Hood	Katie
62483_3	126 17weeks	Brown	Katie
62485_3	129 17weeks	Albino	Katie
62485_4	129 17weeks	Brown.Hood	Katie
62495_3	136 17weeks	Black	Katie
62495_4	136 17weeks	Albino	Katie
62496_3	137 17weeks	Black	Katie
62496_4	137 17weeks	Albino	Katie
62496_5	137 17weeks	Brown	Katie
62496_6	137 17weeks	Albino	Katie
62497_3	140 17weeks	Brown	Katie
62497_4	140 17weeks	Black.Hood	Katie
62506_3	122 17weeks	Black	Jaime
62506_4	122 17weeks	Black.Hood	Jaime
62507_3	124 17weeks	Brown.Hood	Katie
62507_4	124 17weeks	Brown	Katie
62507_6	124 17weeks	Brown	Katie
62509_3	139 17weeks	Black	Jaime
62509_4	139 17weeks	Brown	Jaime
62511_3	148 17weeks	Brown.Hood	Jaime
62511_4	148 17weeks	Black.Hood	Jaime
62513_3	151 17weeks	Albino	Jaime
62513_4	151 17weeks	Black	Jaime
62514_3	153 17weeks	Brown	Jaime
62514_4	153 17weeks	Brown.Hood	Jaime
62516_3	159 17weeks	Black	Katie
62516_4	159 17weeks	Black	Katie
62520_3	163 17weeks	Brown.Hood	Katie
62520_4	163 17weeks	Brown.Hood	Katie
62561_3	128 17weeks	Albino	Katie
62561_4	128 17weeks	Black	Katie
62561_5	128 17weeks	Albino	Katie
62561_6	128 17weeks	Brown.Hood	Katie
62562_3	154 17weeks	Brown	Katie
62562_4	154 17weeks	Brown.Hood	Katie
62562_5	154 17weeks	Brown	Katie

62562_6	154 17weeks	Brown.Hood	Katie
62567_3	157 17weeks	Black	Katie
62567_4	157 17weeks	Black.Hood	Katie
62569_3	129 17weeks	Black.Hood	Katie
62569_4	129 17weeks	Albino	Katie
62570_3	131 17weeks	Black.Hood	Katie
62570_4	131 17weeks	Brown.Hood	Katie
62577_3	118 17weeks	Black.Hood	Katie
62577_4	118 17weeks	Brown.Hood	Katie
62579_3	135 17weeks	Black	Katie
62579_4	135 17weeks	Albino	Katie
62584_3	141 17weeks	Black.Hood	Katie
62584_4	141 17weeks	Albino	Katie
62584_5	141 17weeks	Brown.Hood	Katie
62584_6	141 17weeks	Black.Hood	Katie
62585_3	142 17weeks	Albino	Katie
62585_4	142 17weeks	Black.Hood	Katie
62587_3	152 17weeks	Black.Hood	Katie
62587_4	152 17weeks	Black.Hood	Katie
62594_3	126 17weeks	Brown	Katie
62594_4	126 17weeks	Albino	Katie
62594_5	126 17weeks	Brown	Katie
62594_6	126 17weeks	Albino	Katie
62595_3	138 17weeks	Brown.Hood	Katie
62595_4	138 17weeks	Brown	Katie
62596_3	147 17weeks	Black	Katie
62596_4	147 17weeks	Black	Katie
62596_5	147 17weeks	Black.Hood	Katie
62596_6	147 17weeks	Black	Katie
62597_3	149 17weeks	Brown.Hood	Katie
62597_4	149 17weeks	Black.Hood	Katie
62604_3	129 17weeks	Brown.Hood	Katie
62604_4	129 17weeks	Brown.Hood	Katie
62605_3	134 17weeks	Black.Hood	Katie
62605_4	134 17weeks	Black.Hood	Katie
62607_3	145 17weeks	Brown	Katie
62607_4	145 17weeks	Brown.Hood	Katie
62608_3	133 17weeks	Black.Hood	Katie
62608_4	133 17weeks	Albino	Katie
62608_5	133 17weeks	Black.Hood	Katie
62608_6	133 17weeks	Black.Hood	Katie
62611_3	143 17weeks	Albino	Katie
62611_4	143 17weeks	Black.Hood	Katie
62611_5	143 17weeks	Albino	Katie
62611_6	143 17weeks	Brown.Hood	Katie
62612_3	125 17weeks	Black	Katie

62612_4	125 17weeks	Brown.Hood	Katie
62613_3	151 17weeks	Black.Hood	Katie
62613_4	151 17weeks	Albino	Katie
62613_5	151 17weeks	Black.Hood	Katie
62613_6	151 17weeks	Black	Katie
62615_3	118 17weeks	Brown.Hood	Katie
62618_3	127 17weeks	Brown.Hood	Katie
62618_4	127 17weeks	Brown	Katie
62631_3	120 17weeks	Black	Katie
62631_4	120 17weeks	Black.Hood	Katie
62633_3	129 17weeks	Albino	Katie
62633_4	129 17weeks	Black.Hood	Katie
62634_3	132 17weeks	Black.Hood	Katie
62635_3	134 17weeks	Black.Hood	Katie
62635_4	134 17weeks	Black.Hood	Katie
62636_3	150 17weeks	Black.Hood	Katie
62636_4	150 17weeks	Black.Hood	Katie
62638_3	158 17weeks	Black	Katie
62638_4	158 17weeks	Brown.Hood	Katie
62640_3	160 17weeks	Black.Hood	Katie
62640_4	160 17weeks	Black	Katie
62641_3	123 17weeks	Brown.Hood	Katie
62641_4	123 17weeks	Black.Hood	Katie
62642_3	127 17weeks	Albino	Katie
62642_4	127 17weeks	Brown.Hood	Katie
62647_3	137 17weeks	Brown	Katie
62647_4	137 17weeks	Black	Katie
62649_3	147 17weeks	Black	Katie
62651_3	149 17weeks	Black.Hood	Katie
62651_4	149 17weeks	Brown.Hood	Katie
62652_3	152 17weeks	Black.Hood	Katie
62652_4	152 17weeks	Brown.Hood	Katie
62653_3	160 17weeks	Black.Hood	Katie
62653_4	160 17weeks	Black	Katie
62655_3	117 17weeks	Brown.Hood	Katie
62655_4	117 17weeks	Brown.Hood	Katie
62658_3	142 17weeks	Brown.Hood	Katie
62658_4	142 17weeks	Albino	Katie
62661_3	157 17weeks	Black	Katie
62661_4	157 17weeks	Black.Hood	Katie
62663_3	163 17weeks	Brown.Hood	Katie
62663_4	163 17weeks	Albino	Katie
62666_3	124 17weeks	Brown.Hood	Katie
62666_4	124 17weeks	Brown.Hood	Katie
62667_3	126 17weeks	Brown.Hood	Katie
62667_4	126 17weeks	Brown.Hood	Katie

62669_3	159 17weeks	Black	Katie
62669_4	159 17weeks	Black.Hood	Katie
62669_5	159 17weeks	Black	Katie
62669_6	159 17weeks	Black	Katie
62672_3	123 17weeks	Brown.Hood	Katie
62672_4	123 17weeks	Black.Hood	Katie
62675_4	136 17weeks	Black	Katie
62677_3	140 17weeks	Brown	Katie
62677_4	140 17weeks	Black.Hood	Katie
62678_3	141 17weeks	Brown.Hood	Katie
62678_4	141 17weeks	Brown.Hood	Katie
62678_5	141 17weeks	Brown.Hood	Katie
62678_6	141 17weeks	Albino	Katie
62679_3	145 17weeks	Black	Katie
62679_4	145 17weeks	Albino	Katie
62680_3	147 17weeks	Black	Katie
62680_4	147 17weeks	Black.Hood	Katie
62681_3	150 17weeks	Black	Katie
62681_4	150 17weeks	Black.Hood	Katie
62683_3	155 17weeks	Brown	Katie
62683_4	155 17weeks	Albino	Katie
62684_3	117 17weeks	Black.Hood	Katie
62684_4	117 17weeks	Brown.Hood	Katie
62685_3	118 17weeks	Brown.Hood	Katie
62685_4	118 17weeks	Black.Hood	Katie
62686_3	121 17weeks	Black	Katie
62686_4	121 17weeks	Black.Hood	Katie
62692_3	142 17weeks	Albino	Katie
62692_4	142 17weeks	Brown	Katie
62695_4	153 17weeks	Brown.Hood	Katie
62700_3	157 17weeks	Albino	Katie
62700_4	157 17weeks	Black	Katie
62718_3	134 17weeks	Black.Hood	Katie
62718_4	134 17weeks	Black.Hood	Katie
62720_3	125 17weeks	Brown	Katie
62720_4	125 17weeks	Brown.Hood	Katie
62721_3	154 17weeks	Brown	Katie
62721_4	154 17weeks	Brown	Katie
62724_3	160 17weeks	Black.Hood	Katie
62724_4	160 17weeks	Black	Katie
62725_3	121 17weeks	Brown	Katie
62725_4	121 17weeks	Brown.Hood	Katie
62726_3	128 17weeks	Albino	Katie
62727_3	147 17weeks	Black.Hood	Katie
62728_3	131 17weeks	Black.Hood	Katie
62728_4	131 17weeks	Black.Hood	Katie

62728_5	131 17weeks	Black.Hood	Katie
62731_3	135 17weeks	Black	Katie
62731_4	135 17weeks	Black	Katie
62732_3	139 17weeks	Brown	Katie
62732_4	139 17weeks	Black	Katie
62733_3	140 17weeks	Brown	Katie
62733_5	140 17weeks	Brown	Katie
62733_6	140 17weeks	Brown.Hood	Katie
62734_3	143 17weeks	Albino	Katie
62734_4	143 17weeks	Brown.Hood	Katie
62762_3	148 17weeks	Albino	Katie
62762_4	148 17weeks	Brown.Hood	Katie
62763_3	152 17weeks	Black.Hood	Katie
62763_4	152 17weeks	Black.Hood	Katie
62764_3	153 17weeks	Brown	Katie
62764_4	153 17weeks	Brown.Hood	Katie
62765_3	157 17weeks	Albino	Katie
62765_4	157 17weeks	Black	Katie
62769_3	120 17weeks	Black	Katie
62769_4	120 17weeks	Black.Hood	Katie
62769_5	120 17weeks	Black	Katie
62769_6	120 17weeks	Black	Katie
62771_3	126 17weeks	Albino	Katie
62771_4	126 17weeks	Brown.Hood	Katie
62771_5	126 17weeks	Albino	Katie
62771_6	126 17weeks	Brown.Hood	Katie
62785_3	208 17weeks	Brown.Hood	Sonia
62785_4	208 17weeks	Albino	Sonia
62788_3	133 17weeks	Black.Hood	Katie
62788_4	133 17weeks	Black.Hood	Katie
62789_3	135 17weeks	Black	Katie
62789_4	135 17weeks	Black	Katie
62790_3	141 17weeks	Brown.Hood	Katie
62790_4	141 17weeks	Black.Hood	Katie
62792_3	151 17weeks	Black	Katie
62792_4	151 17weeks	Black.Hood	Katie
62797_3	142 17weeks	Black.Hood	Katie
62797_4	142 17weeks	Brown	Katie
62798_3	148 17weeks	Brown.Hood	Katie
62798_4	148 17weeks	Albino	Katie
62799_3	153 17weeks	Brown	Jaime
62799_4	153 17weeks	Brown.Hood	Jaime
62800_3	163 17weeks	Albino	Jaime
62800_4	163 17weeks	Brown.Hood	Jaime
62802_3	156 17weeks	Albino	Jaime
62802_4	156 17weeks	Brown	Jaime

62803_4	161 17weeks	Black.Hood	Jaime
62818_3	175 17weeks	Brown.Hood	Sonia
62818_4	175 17weeks	Black.Hood	Sonia
62818_5	175 17weeks	Brown.Hood	Sonia
62818_6	175 17weeks	Brown.Hood	Sonia
62819_3	179 17weeks	Black.Hood	Sonia
62819_4	179 17weeks	Albino	Sonia
62819_5	179 17weeks	Black.Hood	Sonia
62819_6	179 17weeks	Albino	Sonia
62835_3	172 17weeks	Brown.Hood	Sonia
62835_4	172 17weeks	Brown.Hood	Sonia
62854_3	165 17weeks	Albino	Sonia
62854_4	165 17weeks	Albino	Sonia
62857_3	173 17weeks	Brown	Sonia
62857_4	173 17weeks	Brown	Sonia
62858_3	174 17weeks	Albino	Sonia
62858_4	174 17weeks	Albino	Sonia
62859_4	180 17weeks	Black.Hood	Sonia
62864_3	207 17weeks	Albino	Sonia
62864_4	207 17weeks	Brown.Hood	Sonia
62867_3	164 17weeks	Black.Hood	Sonia
62867_4	164 17weeks	Black.Hood	Sonia
62868_3	167 17weeks	Albino	Sonia
62868_4	167 17weeks	Black	Sonia
62872_3	166 17weeks	Albino	Sonia
62872_4	166 17weeks	Black.Hood	Sonia
62873_3	175 17weeks	Brown.Hood	Sonia
62873_4	175 17weeks	Brown.Hood	Sonia
62873_5	175 17weeks	Brown.Hood	Sonia
62875_3	178 17weeks	Black.Hood	Sonia
62875_4	178 17weeks	Black.Hood	Sonia
62881_3	198 17weeks	Albino	Sonia
62882_3	199 17weeks	Brown	Sonia
62882_4	199 17weeks	Albino	Sonia
62883_3	203 17weeks	Black.Hood	Sonia
62883_4	203 17weeks	Black.Hood	Sonia
62884_3	205 17weeks	Black	Sonia
62884_4	205 17weeks	Black	Sonia
62886_3	176 17weeks	Brown.Hood	Katie
62886_4	176 17weeks	Black.Hood	Katie
62887_3	197 17weeks	Black	Katie
62887_4	197 17weeks	Black	Katie
62888_3	169 17weeks	Black.Hood	Sonia
62888_4	169 17weeks	Brown.Hood	Sonia
62892_3	185 17weeks	Black.Hood	Katie
62892_4	185 17weeks	Brown.Hood	Katie

62893_3	186 17weeks	Albino	Sonia
62893_4	186 17weeks	Albino	Sonia
62895_3	168 17weeks	Black.Hood	Katie
62895_4	168 17weeks	Black.Hood	Katie
62896_3	172 17weeks	Brown.Hood	Katie
62896_4	172 17weeks	Brown.Hood	Katie
62897_4	173 17weeks	Brown	Katie
62900_3	193 17weeks	Black.Hood	Katie
62900_4	193 17weeks	Brown.Hood	Katie
62901_3	202 17weeks	Albino	Katie
62901_4	202 17weeks	Black	Katie
62901_5	202 17weeks	Black.Hood	Katie
62901_6	202 17weeks	Albino	Katie
62909_3	177 17weeks	Albino	Katie
62909_4	177 17weeks	Albino	Katie
62910_3	178 17weeks	Black.Hood	Katie
62910_4	178 17weeks	Black.Hood	Katie
62911_3	179 17weeks	Albino	Katie
62911_4	179 17weeks	Black.Hood	Katie
62912_3	182 17weeks	Brown	Katie
62912_4	182 17weeks	Brown	Katie
62913_3	187 17weeks	Brown	Katie
62913_4	187 17weeks	Brown	Katie
62913_5	187 17weeks	Brown	Katie
62913_6	187 17weeks	Brown	Katie
62917_3	195 17weeks	Black.Hood	Katie
62917_4	195 17weeks	Albino	Katie
62919_3	206 17weeks	Black.Hood	Katie
62919_4	206 17weeks	Black.Hood	Katie
62920_4	165 17weeks	Black.Hood	Sonia
62920_5	165 17weeks	Albino	Sonia
62920_6	165 17weeks	Brown.Hood	Sonia
62921_3	166 17weeks	Black.Hood	Katie
62921_4	166 17weeks	Albino	Katie
62922_3	169 17weeks	Black.Hood	Sonia
62922_4	169 17weeks	Brown.Hood	Sonia
62923_3	170 17weeks	Albino	Sonia
62923_4	170 17weeks	Brown	Sonia
62928_3	200 17weeks	Black	Katie
62928_4	200 17weeks	Brown	Katie
62929_3	201 17weeks	Black	Katie
62929_4	201 17weeks	Albino	Katie
62934_3	185 17weeks	Black.Hood	Sonia
62934_4	185 17weeks	Brown.Hood	Sonia
62935_3	207 17weeks	Albino	Sonia
62936_3	164 17weeks	Albino	Katie

62936_4	164 17weeks	Black.Hood	Katie
62938_3	172 17weeks	Brown.Hood	Katie
62938_4	172 17weeks	Brown.Hood	Katie
62943_3	193 17weeks	Brown.Hood	Katie
62943_4	193 17weeks	Black.Hood	Katie
62944_3	196 17weeks	Black	Katie
62944_4	196 17weeks	Black.Hood	Katie
62961_3	183 17weeks	Brown	Katie
62961_4	183 17weeks	Black.Hood	Katie
62962_3	185 17weeks	Brown.Hood	Katie
62962_4	185 17weeks	Brown.Hood	Katie
62963_4	186 17weeks	Albino	Katie
62966_3	205 17weeks	Black	Katie
62966_4	205 17weeks	Black.Hood	Katie
62968_3	168 17weeks	Black.Hood	Katie
62968_4	168 17weeks	Black.Hood	Katie
62970_5	174 17weeks	Albino	Katie
62975_3	197 17weeks	Black	Katie
62975_4	197 17weeks	Black	Katie
62975_5	197 17weeks	Black	Katie
62977_1	207 17weeks	Brown.Hood	Katie
62978_3	164 17weeks	Black.Hood	Katie
62978_4	164 17weeks	Black.Hood	Katie
62978_5	164 17weeks	Black.Hood	Katie
62978_6	164 17weeks	Black.Hood	Katie
62980_3	173 17weeks	Black	Jaime
62980_4	173 17weeks	Brown	Jaime
62980_5	173 17weeks	Black	Jaime
62980_6	173 17weeks	Brown	Jaime
62980_7	173 17weeks	Brown	Jaime
62982_3	178 17weeks	Black.Hood	Jaime
62982_6	178 17weeks	Black.Hood	Jaime
62982_7	178 17weeks	Black.Hood	Jaime
62986_3	190 17weeks	Black	Jaime
62987_3	194 17weeks	Brown	Katie
62987_4	194 17weeks	Black.Hood	Katie
62988_5	198 17weeks	Brown.Hood	Katie
62988_6	198 17weeks	Albino	Katie
62991_3	206 17weeks	Black.Hood	Jaime
62995_3	183 17weeks	Brown.Hood	Katie
62995_4	183 17weeks	Brown	Katie
62996_3	186 17weeks	Albino	Katie
62996_4	186 17weeks	Albino	Katie
62999_4	203 17weeks	Black.Hood	Katie
63000_3	168 17weeks	Brown.Hood	Katie
63000_4	168 17weeks	Brown	Katie

63002_3	184 17weeks	Albino	Katie
63002_4	184 17weeks	Black	Katie
63003_3	185 17weeks	Black.Hood	Katie
63006_3	197 17weeks	Black	Katie
63006_4	197 17weeks	Black	Katie
63008_3	207 17weeks	Albino	Katie
63008_4	207 17weeks	Brown.Hood	Katie
63008_5	207 17weeks	Albino	Katie
63012_3	172 17weeks	Brown.Hood	Katie
63012_4	172 17weeks	Brown.Hood	Katie
63014_3	177 17weeks	Albino	Katie
63014_4	177 17weeks	Albino	Katie
63016_3	180 17weeks	Brown.Hood	Katie
63016_4	180 17weeks	Black	Katie
63017_3	181 17weeks	Brown	Katie
63017_4	181 17weeks	Albino	Katie
63032_3	174 17weeks	Albino	Katie
63032_4	174 17weeks	Albino	Katie
63032_5	174 17weeks	Albino	Katie
63032_6	174 17weeks	Albino	Katie
63056_3	183 17weeks	Brown	Katie
63065_3	214 24weeks	Brown.Hood	Katie
63065_4	214 24weeks	Black.Hood	Katie
63066_3	232 24weeks	Black.Hood	Jaime
63066_4	232 24weeks	Brown	Jaime
63073_3	193 17weeks	Brown.Hood	Katie
63086_3	218 24weeks	Brown.Hood	Katie
63086_4	218 24weeks	Brown.Hood	Katie
63087_3	229 24weeks	Black	Katie
63087_4	229 24weeks	Black	Katie
63090_3	245 24weeks	Black	Katie
63090_4	245 24weeks	Albino	Katie
63092_3	217 24weeks	Brown	Katie
63092_4	217 24weeks	Brown.Hood	Katie
63094_3	228 24weeks	Brown	Katie
63094_4	228 24weeks	Black	Katie
63095_3	248 24weeks	Brown	Katie
63095_4	248 24weeks	Brown	Katie
63118_3	233 24weeks	Brown	Katie
63118_4	233 24weeks	Black	Katie
63118_5	233 24weeks	Brown	Katie
63119_3	249 24weeks	Black.Hood	Jaime
63119_4	249 24weeks	Brown	Jaime
63119_5	249 24weeks	Brown.Hood	Jaime
63119_6	249 24weeks	Albino	Jaime
63157_3	209 24weeks	Albino	Katie

63157_4	209 24weeks	Brown.Hood	Katie
63159_3	225 24weeks	Black	Katie
63159_4	225 24weeks	Brown	Katie
63162_3	241 24weeks	Brown	Katie
63162_4	241 24weeks	Black.Hood	Katie
63167_3	213 24weeks	Black.Hood	Katie
63167_4	213 24weeks	Brown.Hood	Katie
63168_3	226 24weeks	Brown	Katie
63168_4	226 24weeks	Brown.Hood	Katie
63188_3	170 24weeks	Brown.Hood	Jaime
63197_3	243 24weeks	Black	Jaime
63197_4	243 24weeks	Black.Hood	Jaime
63197_5	243 24weeks	Black	Jaime
63197_6	243 24weeks	Black.Hood	Jaime
63199_3	222 24weeks	Black.Hood	Katie
63199_4	222 24weeks	Black.Hood	Katie
63200_3	254 24weeks	Black.Hood	Katie
63200_4	254 24weeks	Black	Katie
63202_3	215 24weeks	Brown	Katie
63227_3	223 24weeks	Black.Hood	Katie
63227_4	223 24weeks	Black.Hood	Katie
63229_3	244 24weeks	Black	Katie
63229_4	244 24weeks	Brown	Katie
63237_3	219 24weeks	Brown.Hood	Katie
63237_4	219 24weeks	Black.Hood	Katie
63238_3	249 24weeks	Brown.Hood	Katie
63238_4	249 24weeks	Albino	Katie
63244_3	211 24weeks	Albino	Katie
63245_3	218 24weeks	Brown.Hood	Katie
63245_4	218 24weeks	Brown.Hood	Katie
63246_3	221 24weeks	Black.Hood	Katie
63246_4	221 24weeks	Black.Hood	Katie
63247_3	224 24weeks	Brown	Katie
63247_4	224 24weeks	Brown.Hood	Katie
63248_3	231 24weeks	Albino	Katie
63248_4	231 24weeks	Albino	Katie
63250_3	252 24weeks	Black	Katie
63250_4	252 24weeks	Black	Katie
63265_3	238 24weeks	Black	Katie
63265_4	238 24weeks	Brown	Katie
63267_3	244 24weeks	Brown.Hood	Katie
63267_4	244 24weeks	Black.Hood	Katie
63277_3	228 24weeks	Black	Katie
63278_3	229 24weeks	Black	Katie
63278_4	229 24weeks	Black	Katie
63279_3	243 24weeks	Black.Hood	Katie

63279_4	243 24weeks	Black	Katie
63280_3	248 24weeks	Black	Katie
63280_4	248 24weeks	Brown	Katie
63281_3	256 24weeks	Black.Hood	Katie
63281_4	256 24weeks	Black.Hood	Katie
63292_3	210 24weeks	Albino	Katie
63292_4	210 24weeks	Albino	Katie
63292_5	210 24weeks	Albino	Katie
63292_6	210 24weeks	Albino	Katie
63293_3	212 24weeks	Black.Hood	Katie
63293_4	212 24weeks	Albino	Katie
63294_3	214 24weeks	Black.Hood	Katie
63294_4	214 24weeks	Black.Hood	Katie
63296_3	216 24weeks	Albino	Katie
63296_4	216 24weeks	Brown	Katie
63298_4	219 24weeks	Brown.Hood	Katie
63298_5	219 24weeks	Brown.Hood	Katie
63302_3	226 24weeks	Black	Katie
63304_3	232 24weeks	Albino	Katie
63304_4	232 24weeks	Black.Hood	Katie
63305_3	234 24weeks	Brown.Hood	Katie
63305_4	234 24weeks	Brown	Katie
63306_3	238 24weeks	Black	Katie
63306_4	238 24weeks	Brown	Katie
63307_3	240 24weeks	Albino	Katie
63307_4	240 24weeks	Brown.Hood	Katie
63308_3	251 24weeks	Black	Katie
63308_4	251 24weeks	Black.Hood	Katie
63312_3	218 24weeks	Brown.Hood	Katie
63312_4	218 24weeks	Brown.Hood	Katie
63313_3	227 24weeks	Brown	Katie
63313_4	227 24weeks	Brown.Hood	Katie
63315_3	243 24weeks	Black	Katie
63315_4	243 24weeks	Black.Hood	Katie
63324_3	211 24weeks	Albino	Katie
63324_4	211 24weeks	Black.Hood	Katie
63327_3	229 24weeks	Black	Katie
63328_3	232 24weeks	Black	Katie
63328_4	232 24weeks	Brown	Katie
63329_3	242 24weeks	Black	Katie
63329_4	242 24weeks	Black.Hood	Katie
63330_3	249 24weeks	Brown.Hood	Katie
63330_4	249 24weeks	Brown	Katie
63331_3	255 24weeks	Brown.Hood	Katie
63331_4	255 24weeks	Brown.Hood	Katie
63332_3	239 24weeks	Brown	Katie

63332_4	239 24weeks	Black.Hood	Katie
63332_5	239 24weeks	Black	Katie
63332_6	239 24weeks	Black.Hood	Katie
63335_4	213 24weeks	Black.Hood	Katie
63337_3	220 24weeks	Black.Hood	Katie
63337_4	220 24weeks	Brown.Hood	Katie
63337_5	220 24weeks	Brown.Hood	Katie
63337_6	220 24weeks	Brown.Hood	Katie
63339_3	225 24weeks	Brown	Katie
63339_4	225 24weeks	Black	Katie
63340_3	227 24weeks	Brown	Katie
63340_4	227 24weeks	Brown	Katie
63346_3	252 24weeks	Black	Katie
63346_4	252 24weeks	Black	Katie
63350_4	219 24weeks	Brown.Hood	Katie
63358_3	253 24weeks	Black.Hood	Katie
63358_4	253 24weeks	Black.Hood	Katie
63367_3	218 24weeks	Brown.Hood	Jaime
63367_4	218 24weeks	Brown.Hood	Jaime
63369_4	228 24weeks	Brown	Jaime
63372_4	255 24weeks	Black.Hood	Jaime
63373_3	256 24weeks	Black.Hood	Jaime
63378_3	231 24weeks	Black.Hood	Katie
63378_4	231 24weeks	Brown.Hood	Katie
63381_3	240 24weeks	Black.Hood	Katie
63381_4	240 24weeks	Brown.Hood	Katie
63382_3	252 24weeks	Black	Katie
63382_4	252 24weeks	Black.Hood	Katie
63385_3	246 24weeks	Albino	Katie.Nick
63385_4	246 24weeks	Albino	Katie.Nick
63392_3	226 24weeks	Brown.Hood	Katie
63407_4	256 24weeks	Black.Hood	Katie
63407_6	256 24weeks	Black.Hood	Katie
63410_3	211 24weeks	Albino	Katie.Nick
63425_3	234 24weeks	Black.Hood	Nick
63428_3	250 24weeks	Albino	Katie.Nick
63428_4	250 24weeks	Brown	Katie.Nick
63430_3	253 24weeks	Black.Hood	Nick
63430_4	253 24weeks	Black.Hood	Nick
63437_4	256 24weeks	Black.Hood	Katie
63437_7	256 24weeks	Black.Hood	Katie
63437_8	256 24weeks	Black.Hood	Katie
63443_3	213 24weeks	Black.Hood	Nick
63443_4	213 24weeks	Black.Hood	Nick
63444_3	219 24weeks	Brown.Hood	Nick
63444_4	219 24weeks	Brown.Hood	Nick

63451_3	217 24weeks	Brown	Nick
63451_4	217 24weeks	Brown.Hood	Nick
63453_3	224 24weeks	Black	Nick
63453_4	224 24weeks	Albino	Nick
63456_3	233 24weeks	Albino	Nick
63456_4	233 24weeks	Brown	Nick
63460_3	246 24weeks	Albino	Nick
63460_4	246 24weeks	Albino	Nick
63461_3	252 24weeks	Black	Nick
63461_4	252 24weeks	Black.Hood	Nick
63463_3	212 24weeks	Black.Hood	Nick
63463_4	212 24weeks	Black.Hood	Nick
63465_3	216 24weeks	Brown	Nick
63465_4	216 24weeks	Brown.Hood	Nick
63468_3	223 24weeks	Black.Hood	Nick
63468_4	223 24weeks	Black.Hood	Nick
63469_3	226 24weeks	Brown	Nick
63471_4	239 24weeks	Black	Nick
63475_3	255 24weeks	Albino	Nick
63475_4	255 24weeks	Brown.Hood	Nick
63478_3	225 24weeks	Black	Nick
63478_4	225 24weeks	Black	Nick
63478_5	225 24weeks	Black	Nick
63483_3	231 24weeks	Albino	Nick
63483_4	231 24weeks	Brown.Hood	Nick
63484_3	240 24weeks	Black.Hood	Nick
63484_4	240 24weeks	Brown.Hood	Nick
63491_3	220 24weeks	Black.Hood	Nick
63491_4	220 24weeks	Brown.Hood	Nick
63493_3	227 24weeks	Brown.Hood	Nick
63493_4	227 24weeks	Brown	Nick
63497_3	241 24weeks	Brown	Nick
63497_4	241 24weeks	Brown.Hood	Nick
63498_3	246 24weeks	Albino	Nick
63498_4	246 24weeks	Albino	Nick
63589_1	262 24weeks	Black	Nick
63589_2	262 24weeks	Black.Hood	Nick
63607_1	288 24weeks	Albino	Nick
63607_2	288 24weeks	Black	Nick
63658_1	279 24weeks	Albino	Jaime
63658_2	279 24weeks	Brown.Hood	Jaime
63659_1	286 24weeks	Brown.Hood	Jaime
63659_2	286 24weeks	Brown.Hood	Jaime
63663_1	296 24weeks	Black.Hood	Jaime
63663_2	296 24weeks	Black.Hood	Jaime
63665_1	260 24weeks	Black.Hood	Jaime

63665_2	260 24weeks	Black.Hood	Jaime
63665_3	260 24weeks	Black.Hood	Jaime
63665_4	260 24weeks	Black.Hood	Jaime
63666_1	261 24weeks	Black.Hood	Jaime
63666_2	261 24weeks	Brown.Hood	Jaime
63666_3	261 24weeks	Brown.Hood	Jaime
63666_4	261 24weeks	Brown.Hood	Jaime
63667_1	263 24weeks	Brown	Jaime
63667_2	263 24weeks	Albino	Jaime
63667_3	263 24weeks	Brown	Jaime
63668_1	266 24weeks	Brown.Hood	Jaime
63669_1	268 24weeks	Black.Hood	Jaime
63669_2	268 24weeks	Brown.Hood	Jaime
63671_1	277 24weeks	Black	Jaime
63671_2	277 24weeks	Black.Hood	Jaime
63677_1	270 24weeks	Black.Hood	Nick
63677_2	270 24weeks	Black.Hood	Nick
63677_4	270 24weeks	Black.Hood	Nick
63678_1	272 24weeks	Brown	Jaime
63678_2	272 24weeks	Brown.Hood	Jaime
63680_1	293 24weeks	Black.Hood	Nick
63680_2	293 24weeks	Black.Hood	Nick
63680_3	293 24weeks	Black.Hood	Nick
63680_4	293 24weeks	Black.Hood	Nick
63682_1	265 24weeks	Brown.Hood	Nick
63682_2	265 24weeks	Brown.Hood	Nick
63683_1	269 24weeks	Black.Hood	Nick
63683_2	269 24weeks	Black.Hood	Nick
63686_1	275 24weeks	Brown	Nick
63686_2	275 24weeks	Brown	Nick
63688_1	284 24weeks	Brown.Hood	Nick
63688_2	284 24weeks	Brown.Hood	Nick
63689_1	285 24weeks	Brown	Nick
63689_2	285 24weeks	Albino	Nick
63695_1	259 24weeks	Albino	Nick
63695_2	259 24weeks	Brown.Hood	Nick
63712_1	277 24weeks	Brown	Nick
63712_2	277 24weeks	Brown.Hood	Nick
63715_1	264 24weeks	Albino	Nick
63715_2	264 24weeks	Brown	Nick
63717_1	258 24weeks	Albino	Nick
63717_2	258 24weeks	Albino	Nick
63718_1	261 24weeks	Black.Hood	Nick
63718_2	261 24weeks	Black.Hood	Nick
63719_1	263 24weeks	Albino	Nick
63719_2	263 24weeks	Brown.Hood	Nick

63722_1	276 24weeks	Black	Nick
63723_1	284 24weeks	Brown.Hood	Nick
63723_2	284 24weeks	Black.Hood	Nick
63724_1	290 24weeks	Albino	Nick
63724_2	290 24weeks	Brown.Hood	Nick
63727_1	271 24weeks	Black.Hood	Nick
63727_2	271 24weeks	Black.Hood	Nick
63734_1	269 24weeks	Albino	Katie
63734_2	269 24weeks	Black.Hood	Katie
63736_1	275 24weeks	Albino	Katie
63736_2	275 24weeks	Brown	Katie
63741_1	268 24weeks	Brown.Hood	Katie
63741_2	268 24weeks	Black.Hood	Katie
63742_1	291 24weeks	Albino	Katie
63742_2	291 24weeks	Black.Hood	Katie
63743_1	285 24weeks	Albino	Nick
63743_2	285 24weeks	Brown	Nick
63745_1	267 24weeks	Black	Katie
63745_2	267 24weeks	Black.Hood	Katie
63749_1	281 24weeks	Brown	Katie
63749_2	281 24weeks	Brown	Katie
63751_1	272 24weeks	Black	Katie
63751_2	272 24weeks	Brown.Hood	Katie
63752_1	266 24weeks	Brown.Hood	Katie
63752_2	266 24weeks	Black.Hood	Katie
63753_1	283 24weeks	Black.Hood	Katie
63753_2	283 24weeks	Brown.Hood	Katie
63754_1	265 24weeks	Brown.Hood	Katie
63754_2	265 24weeks	Brown.Hood	Katie
63757_1	253 24weeks	Black.Hood	Katie
63757_2	253 24weeks	Black.Hood	Katie
63759_1	288 24weeks	Black	Katie
63759_2	288 24weeks	Brown	Katie
63760_1	264 24weeks	Black	Katie
63760_2	264 24weeks	Black	Katie
63761_1	277 24weeks	Albino	Katie
63761_2	277 24weeks	Brown.Hood	Katie
63764_1	294 24weeks	Black	Katie
63764_2	294 24weeks	Black.Hood	Katie
63765_1	295 24weeks	Black.Hood	Katie
63765_2	295 24weeks	Black.Hood	Katie
63766_1	298 24weeks	Brown.Hood	Katie
63766_2	298 24weeks	Black.Hood	Katie
63768_1	262 24weeks	Black	Katie
63768_2	262 24weeks	Albino	Katie
63769_1	263 24weeks	Brown.Hood	Katie

63769_2	263 24weeks	Brown	Katie
63770_1	273 24weeks	Black	Katie
63770_2	273 24weeks	Black.Hood	Katie
63772_1	278 24weeks	Brown.Hood	Katie
63772_2	278 24weeks	Brown.Hood	Katie
63775_1	257 24weeks	Albino	Katie
63775_2	257 24weeks	Albino	Katie
63777_1	259 24weeks	Black	Katie
63777_2	259 24weeks	Black.Hood	Katie
63779_1	272 24weeks	Black.Hood	Katie
63779_2	272 24weeks	Brown.Hood	Katie
63780_1	280 24weeks	Black	Katie
63780_2	280 24weeks	Albino	Katie
63782_1	285 24weeks	Brown	Katie
63782_2	285 24weeks	Brown.Hood	Katie
63785_1	297 24weeks	Black.Hood	Katie
63791_3	260 24weeks	Black.Hood	Katie
63791_4	260 24weeks	Black.Hood	Katie
63792_3	270 24weeks	Albino	Katie
63792_4	270 24weeks	Black.Hood	Katie
63793_3	276 24weeks	Black	Katie
63793_4	276 24weeks	Black.Hood	Katie
63793_5	276 24weeks	Black	Katie
63793_6	276 24weeks	Black.Hood	Katie
63795_3	284 24weeks	Brown.Hood	Katie
63795_4	284 24weeks	Black.Hood	Katie
63800_1	268 24weeks	Brown.Hood	Katie
63800_2	268 24weeks	Black.Hood	Katie
63801_3	299 24weeks	Black.Hood	Katie
63801_4	299 24weeks	Black.Hood	Katie
63807_3	277 24weeks	Albino	Katie
63807_4	277 24weeks	Albino	Katie
63810_3	295 24weeks	Black.Hood	Katie
63810_4	295 24weeks	Black.Hood	Katie
63810_5	295 24weeks	Black.Hood	Katie
63810_6	295 24weeks	Black.Hood	Katie
63818_3	262 24weeks	Black.Hood	Katie
63818_4	262 24weeks	Black	Katie
63821_3	279 24weeks	Albino	Katie
63821_4	279 24weeks	Brown.Hood	Katie
63822_3	286 24weeks	Brown.Hood	Katie
63822_4	286 24weeks	Brown.Hood	Katie
63837_3	292 24weeks	Black	Katie
63837_4	292 24weeks	Brown	Katie
63842_3	269 24weeks	Albino	Katie
63842_4	269 24weeks	Black.Hood	Katie

63847_3	294 24weeks	Black	Katie
63847_4	294 24weeks	Black.Hood	Katie
63848_3	296 24weeks	Black.Hood	Katie
63848_4	296 24weeks	Black.Hood	Katie
63849_3	298 24weeks	Black.Hood	Katie
63849_4	298 24weeks	Brown.Hood	Katie
63852_3	292 24weeks	Black	Katie
63852_4	292 24weeks	Albino	Katie
63854_1	274 24weeks	Black	Katie
63854_2	274 24weeks	Black.Hood	Katie
63856_3	287 24weeks	Black	Katie
63856_4	287 24weeks	Black.Hood	Katie
63856_5	287 24weeks	Black	Katie
63856_6	287 24weeks	Black.Hood	Katie
63871_3	259 24weeks	Albino	Katie
63871_4	259 24weeks	Black.Hood	Katie
63872_3	262 24weeks	Black	Katie
63872_4	262 24weeks	Black.Hood	Katie
63873_4	271 24weeks	Black.Hood	Katie
63874_3	279 24weeks	Albino	Katie
63874_4	279 24weeks	Albino	Katie
63875_3	281 24weeks	Albino	Katie
63875_4	281 24weeks	Black	Katie
63895_3	265 24weeks	Brown.Hood	Katie
63895_4	265 24weeks	Brown.Hood	Katie
63897_3	272 24weeks	Albino	Katie
63897_4	272 24weeks	Brown.Hood	Katie
63898_3	275 24weeks	Brown	Katie
63898_4	275 24weeks	Brown	Katie
63906_3	269 17weeks	Black.Hood	Katie
63906_4	269 17weeks	Black.Hood	Katie
63910_4	289 17weeks	Brown.Hood	Katie
63910_5	289 17weeks	Brown.Hood	Katie
63912_3	290 17weeks	Albino	Katie
63912_4	290 17weeks	Black.Hood	Katie
63913_4	293 17weeks	Black.Hood	Katie
63939_3	343 17weeks	Black.Hood	Katie
63939_4	343 17weeks	Black.Hood	Katie
63940_3	279 17weeks	Albino	Jaime
63940_4	279 17weeks	Brown.Hood	Jaime
63941_3	291 17weeks	Albino	Katie
63941_4	291 17weeks	Albino	Katie
63942_3	292 17weeks	Albino	Jaime
63942_4	292 17weeks	Black	Jaime
63942_5	292 17weeks	Albino	Jaime
63942_6	292 17weeks	Black	Jaime

63944_3	296 17weeks	Black.Hood	Katie
63944_4	296 17weeks	Black.Hood	Katie
63944_5	296 17weeks	Black.Hood	Katie
63944_6	296 17weeks	Black.Hood	Katie
63947_3	262 17weeks	Albino	Katie
63947_4	262 17weeks	Black	Katie
63947_5	262 17weeks	Albino	Katie
63948_3	265 17weeks	Brown.Hood	Katie
63948_4	265 17weeks	Brown.Hood	Katie
63949_3	268 17weeks	Brown.Hood	Jaime
63952_3	275 17weeks	Albino	Katie
63952_4	275 17weeks	Brown	Katie
63953_3	276 17weeks	Black	Katie
63953_4	276 17weeks	Black.Hood	Katie
63956_3	297 17weeks	Black.Hood	Jaime
63956_4	297 17weeks	Black.Hood	Jaime
63956_5	297 17weeks	Black.Hood	Jaime
63956_6	297 17weeks	Black.Hood	Jaime
63959_3	260 17weeks	Black.Hood	Katie
63959_4	260 17weeks	Black.Hood	Katie
63961_3	264 17weeks	Albino	Katie
63961_4	264 17weeks	Black	Katie
63966_3	299 17weeks	Albino	Katie
63966_4	299 17weeks	Brown.Hood	Katie
63968_3	257 17weeks	Albino	Katie
63968_4	257 17weeks	Albino	Katie
63972_3	269 17weeks	Albino	Katie
63972_4	269 17weeks	Black.Hood	Katie
63972_5	269 17weeks	Albino	Katie
63974_3	291 17weeks	Brown.Hood	Katie
63974_4	291 17weeks	Brown	Katie
63974_5	291 17weeks	Brown.Hood	Katie
63974_6	291 17weeks	Albino	Katie
63975_3	267 17weeks	Black	Katie
63975_4	267 17weeks	Black.Hood	Katie
63975_5	267 17weeks	Black	Katie
63984_3	281 17weeks	Black	Katie
63984_4	281 17weeks	Brown	Katie
63986_3	296 17weeks	Black.Hood	Katie
63986_4	296 17weeks	Black.Hood	Katie
63986_5	296 17weeks	Black.Hood	Katie
63986_6	296 17weeks	Black.Hood	Katie
63990_3	303 17weeks	Black	Katie
63990_4	303 17weeks	Black.Hood	Katie
63991_3	306 17weeks	Albino	Katie
63991_4	306 17weeks	Albino	Katie

63995_3	322 17weeks	Black.Hood	Katie
63995_4	322 17weeks	Black.Hood	Katie
63997_3	271 17weeks	Black.Hood	Katie
63997_4	271 17weeks	Black.Hood	Katie
64000_3	283 17weeks	Black	Katie
64000_4	283 17weeks	Black.Hood	Katie
64001_3	285 17weeks	Brown	Katie
64001_4	285 17weeks	Brown.Hood	Katie
64003_3	298 17weeks	Brown.Hood	Katie
64003_4	298 17weeks	Black.Hood	Katie
64003_5	298 17weeks	Brown.Hood	Katie
64003_6	298 17weeks	Black.Hood	Katie
64009_3	320 17weeks	Albino	Katie
64009_4	320 17weeks	Brown.Hood	Katie
64011_3	324 17weeks	Brown	Katie
64011_4	324 17weeks	Brown.Hood	Katie
64016_3	267 17weeks	Black	Katie
64016_4	267 17weeks	Black.Hood	Katie
64016_5	267 17weeks	Black	Katie
64016_6	267 17weeks	Black.Hood	Katie
64023_3	305 17weeks	Black.Hood	Katie
64023_4	305 17weeks	Black.Hood	Katie
64024_3	327 17weeks	Brown.Hood	Katie
64024_4	327 17weeks	Black.Hood	Katie
64026_3	337 17weeks	Black.Hood	Katie
64026_4	337 17weeks	Black.Hood	Katie
64027_3	257 17weeks	Albino	Katie
64027_4	257 17weeks	Albino	Katie
64034_3	297 17weeks	Black.Hood	Katie
64034_4	297 17weeks	Black.Hood	Katie
64038_3	308 17weeks	Brown	Katie
64038_4	308 17weeks	Brown.Hood	Katie
64039_3	309 17weeks	Brown	Katie
64039_4	309 17weeks	Black.Hood	Katie
64040_3	313 17weeks	Albino	Katie
64040_4	313 17weeks	Black.Hood	Katie
64043_3	331 17weeks	Brown.Hood	Katie
64043_4	331 17weeks	Brown.Hood	Katie
64045_3	336 17weeks	Black	Katie
64045_4	336 17weeks	Black	Katie
64057_3	302 17weeks	Albino	Katie
64057_4	302 17weeks	Black	Katie
64060_3	307 17weeks	Brown.Hood	Katie
64060_4	307 17weeks	Albino	Katie
64064_3	318 17weeks	Albino	Katie
64064_4	318 17weeks	Brown	Katie

64068_3	329 17weeks	Black	Katie
64068_4	329 17weeks	Black	Katie
64069_3	310 17weeks	Brown.Hood	Katie
64069_4	310 17weeks	Brown	Katie
64070_3	338 17weeks	Black.Hood	Katie
64070_4	338 17weeks	Black.Hood	Katie
64104_3	301 17weeks	Black	Jaime
64104_4	301 17weeks	Black.Hood	Jaime
64105_3	304 17weeks	Brown.Hood	Katie
64105_4	304 17weeks	Black.Hood	Katie
64106_3	305 17weeks	Black.Hood	Jaime
64106_4	305 17weeks	Black.Hood	Jaime
64106_5	305 17weeks	Black.Hood	Jaime
64108_3	315 17weeks	Black.Hood	Jaime
64108_4	315 17weeks	Black.Hood	Jaime
64109_3	316 17weeks	Black.Hood	Katie
64109_4	316 17weeks	Brown.Hood	Katie
64110_3	326 17weeks	Black	Katie
64110_4	326 17weeks	Black	Katie
64111_3	328 17weeks	Brown	Jaime
64112_3	330 17weeks	Brown.Hood	Jaime
64113_3	332 17weeks	Albino	Jaime
64113_4	332 17weeks	Albino	Jaime
64114_3	333 17weeks	Black	Katie
64114_4	333 17weeks	Black.Hood	Katie
64114_5	333 17weeks	Black	Katie
64114_6	333 17weeks	Black	Katie
64115_3	334 17weeks	Brown.Hood	Jaime
64115_4	334 17weeks	Black	Jaime
64116_3	335 17weeks	Black.Hood	Jaime
64116_4	335 17weeks	Black.Hood	Jaime
64119_3	337 17weeks	Black.Hood	Katie
64119_4	337 17weeks	Black.Hood	Katie
64121_3	339 17weeks	Brown.Hood	Stephen
64121_4	339 17weeks	Black.Hood	Stephen
64131_3	314 17weeks	Black.Hood	Jaime
64131_4	314 17weeks	Black.Hood	Jaime
64134_3	321 17weeks	Albino	Jaime
64134_4	321 17weeks	Brown	Jaime
64134_5	321 17weeks	Albino	Jaime
64134_6	321 17weeks	Brown.Hood	Jaime
64142_3	319 17weeks	Albino	Katie
64142_4	319 17weeks	Black.Hood	Katie
64146_3	330 17weeks	Black.Hood	Katie
64146_4	330 17weeks	Brown.Hood	Katie
64148_3	340 17weeks	Black.Hood	Katie

64148_4	340 17weeks	Albino	Katie
64149_3	342 17weeks	Brown.Hood	Katie
64149_4	342 17weeks	Black.Hood	Katie
64152_3	316 17weeks	Brown	Katie
64152_4	316 17weeks	Brown.Hood	Katie
64154_3	327 17weeks	Black.Hood	Katie
64154_4	327 17weeks	Brown.Hood	Katie
64156_3	337 17weeks	Black.Hood	Katie
64159_3	313 17weeks	Black.Hood	Katie
64159_4	313 17weeks	Black.Hood	Katie
64160_2	315 17weeks	Black.Hood	Katie
64162_3	323 17weeks	Black.Hood	Katie
64162_4	323 17weeks	Brown.Hood	Katie
64163_3	331 17weeks	Albino	Katie
64163_4	331 17weeks	Brown.Hood	Katie
64163_5	331 17weeks	Albino	Katie
64163_6	331 17weeks	Brown.Hood	Katie
64164_3	333 17weeks	Black	Katie
64166_3	303 17weeks	Albino	Jaime
64166_4	303 17weeks	Black	Jaime
64166_5	303 17weeks	Albino	Jaime
64167_3	308 17weeks	Black.Hood	Jaime
64167_4	308 17weeks	Brown.Hood	Jaime
64168_3	314 17weeks	Black.Hood	Jaime
64168_4	314 17weeks	Black.Hood	Jaime
64170_3	335 17weeks	Black.Hood	Katie
64170_4	335 17weeks	Black.Hood	Jaime
64171_3	343 17weeks	Black.Hood	Jaime
64177_3	306 17weeks	Brown	Katie
64177_4	306 17weeks	Albino	Katie
64180_3	312 17weeks	Black.Hood	Katie
64180_4	312 17weeks	Black.Hood	Katie
64183_3	319 17weeks	Albino	Katie
64183_4	319 17weeks	Black.Hood	Katie
64185_3	324 17weeks	Brown	Katie
64185_4	324 17weeks	Black	Katie
64186_3	329 17weeks	Black	Katie
64186_4	329 17weeks	Black	Katie
64188_3	338 17weeks	Black.Hood	Katie
64188_4	338 17weeks	Black.Hood	Stephen
64190_3	311 17weeks	Brown.Hood	Stephen
64190_4	311 17weeks	Brown.Hood	Stephen
64191_3	313 17weeks	Black.Hood	Stephen
64191_4	313 17weeks	Albino	Stephen
64191_5	313 17weeks	Black.Hood	Stephen
64192_3	315 17weeks	Black.Hood	Stephen

64192_4	315 17weeks	Black.Hood	Stephen
64194_3	325 17weeks	Black.Hood	Stephen
64194_4	325 17weeks	Black.Hood	Stephen
64196_3	327 17weeks	Black.Hood	Stephen
64196_4	327 17weeks	Brown.Hood	Stephen
64197_3	328 17weeks	Brown.Hood	Stephen
64198_3	334 17weeks	Brown	Stephen
64199_3	341 17weeks	Brown.Hood	Stephen
64199_4	341 17weeks	Albino	Stephen
64199_5	341 17weeks	Brown.Hood	Stephen
64201_3	303 17weeks	Albino	Stephen
64201_4	303 17weeks	Black.Hood	Stephen
64205_3	310 17weeks	Brown	Stephen
64205_4	310 17weeks	Brown.Hood	Stephen
64207_3	343 17weeks	Black.Hood	Stephen
64207_4	343 17weeks	Black.Hood	Stephen
64213_3	307 17weeks	Albino	Stephen
64213_4	307 17weeks	Black.Hood	Stephen
64214_3	308 17weeks	Black	Stephen
64214_4	308 17weeks	Brown	Stephen
64215_3	314 17weeks	Black.Hood	Stephen
64215_4	314 17weeks	Black.Hood	Stephen
64216_3	316 17weeks	Black	Stephen
64216_4	316 17weeks	Brown.Hood	Stephen
64220_3	332 17weeks	Albino	Stephen
64220_4	332 17weeks	Albino	Stephen
64221_3	335 17weeks	Black.Hood	Stephen
64221_4	335 17weeks	Black.Hood	Stephen
64226_4	309 17weeks	Black	Stephen
64227_3	312 17weeks	Black.Hood	Stephen
64230_3	331 17weeks	Black.Hood	Stephen
64230_4	331 17weeks	Black.Hood	Stephen
64230_5	331 17weeks	Black.Hood	Stephen
64230_6	331 17weeks	Black.Hood	Stephen
64231_3	338 17weeks	Black.Hood	Stephen
64231_4	338 17weeks	Black.Hood	Stephen
64234_3	305 17weeks	Black.Hood	Stephen
64234_4	305 17weeks	Albino	Stephen
64234_5	305 17weeks	Black.Hood	Stephen
64235_3	311 17weeks	Brown.Hood	Stephen
64235_4	311 17weeks	Black.Hood	Stephen
64235_5	311 17weeks	Brown.Hood	Stephen
64238_3	326 17weeks	Brown	Stephen
64238_4	326 17weeks	Black.Hood	Stephen
64240_3	334 17weeks	Black	Stephen
64240_4	334 17weeks	Brown	Stephen

64244_3	320 17weeks	Brown.Hood	Stephen
64244_4	320 17weeks	Brown.Hood	Stephen
64246_3	322 17weeks	Black.Hood	Stephen
64246_4	322 17weeks	Black.Hood	Stephen
64246_5	322 17weeks	Black.Hood	Stephen
64246_6	322 17weeks	Black.Hood	Stephen
64247_3	324 17weeks	Brown	Stephen
64247_4	324 17weeks	Brown.Hood	Stephen
64248_3	329 17weeks	Black	Stephen
64248_4	329 17weeks	Black	Stephen
64249_3	310 17weeks	Brown	Stephen
64249_4	310 17weeks	Brown.Hood	Stephen
64251_3	339 17weeks	Brown.Hood	Stephen
64251_4	339 17weeks	Black.Hood	Stephen
64257_3	302 17weeks	Black	Stephen
64257_4	302 17weeks	Albino	Stephen
64258_3	306 17weeks	Brown.Hood	Stephen
64258_4	306 17weeks	Albino	Stephen
64260_3	314 17weeks	Black.Hood	Stephen
64260_4	314 17weeks	Black.Hood	Stephen
64262_3	318 17weeks	Albino	Stephen
64262_4	318 17weeks	Black	Stephen
64267_3	342 17weeks	Black.Hood	Stephen
64293_3	300 17weeks	Albino	Stephen
64294_3	305 17weeks	Albino	Stephen
64294_4	305 17weeks	Black.Hood	Stephen
64295_3	309 17weeks	Brown	Stephen
64295_4	309 17weeks	Brown.Hood	Stephen
64297_3	317 17weeks	Black	Stephen
64297_4	317 17weeks	Brown	Stephen
64297_5	317 17weeks	Black	Stephen
64297_6	317 17weeks	Black.Hood	Stephen
64299_3	325 17weeks	Black.Hood	Stephen
64299_4	325 17weeks	Black.Hood	Stephen
64300_1	327 17weeks	Brown.Hood	Stephen
64300_2	327 17weeks	Black.Hood	Stephen
64300_3	327 17weeks	Brown.Hood	Stephen
64302_3	338 17weeks	Black.Hood	Stephen
64302_4	338 17weeks	Black.Hood	Stephen
64304_1	322 17weeks	Black.Hood	Stephen
64304_2	322 17weeks	Black.Hood	Stephen
64304_3	322 17weeks	Black.Hood	Stephen
64305_3	339 17weeks	Black.Hood	Katie
64305_4	339 17weeks	Brown.Hood	Katie
64305_5	339 17weeks	Black.Hood	Katie
64305_6	339 17weeks	Brown.Hood	Katie

64305_7	339 17weeks	Black.Hood	Katie
64313_3	343 17weeks	Black.Hood	Katie
64313_4	343 17weeks	Black.Hood	Katie
64313_5	343 17weeks	Black.Hood	Katie

number	Bleeder	Injector	Dissector	HarvestNumber	CHOL
7	Leah	Leah	Leah	6	111.5
10	Leah	Leah	Leah	9	78
1	Leah	Leah	Leah	10	89.5
2	Leah	Leah	Leah	1	76
3	Leah	Leah	Leah	2	92.5
4	Leah	Leah	Leah	3	70
6	Leah	Leah	Leah	6	71.5
7	Leah	Leah	Leah	7	87.5
8	Leah	Leah	Leah	8	57
5	Leah	Leah	Leah	4	57.5
6	Leah	Leah	Leah	5	81
2	Leah	Leah	Leah	2	90.5
3	Leah	Leah	Leah	3	65.5
4	Leah	Leah	Leah	4	72
5	Leah	Leah	Leah	5	73
1	Leah	Leah	Leah	1	84
2	Leah	Leah	Leah	2	63
3	Leah	Leah	Leah	3	70
4	Leah	Leah	Leah	4	58
1	Leah	Leah	Leah	1	91.5
2	Leah	Leah	Leah	2	82
3	Leah	Leah	Leah	3	114.5
4	Leah	Leah	Leah	4	65.5
9	Leah	Leah	Leah	9	72
10	Leah	Leah	Leah	10	64
5	Leah	Leah	Leah	5	76
6	Leah	Leah	Leah	6	65.5
7	Leah	Leah	Leah	7	64.5
8	Leah	Leah	Leah	8	67
1	Leah	Leah	Leah	1	68
2	Leah	Leah	Leah	2	81.5
3	Leah	Leah	Leah	3	80.5
5	Leah	Leah	Leah	5	59
6	Leah	Leah	Leah	6	69
8	Leah	Leah	Leah	8	88.5
9	Leah	Leah	Leah	9	101.5
10	Leah	Leah	Leah	10	87
4	Leah	Leah	Leah	4	95
5	Leah	Leah	Leah	5	68
7	Leah	Leah	Leah	7	88.5
9	Leah	Leah	Leah	9	68
1	Leah	Leah	Leah	1	66.5
2	Leah	Leah	Leah	2	71.5

3 Leah	Leah	Leah	3	63
4 Leah	Leah	Leah	4	66.5
5 Leah	Leah	Leah	5	81
7 Leah	Leah	Leah	7	68
5 Leah	Leah	Leah	5	123.5
6 Leah	Leah	Leah	6	111.5
7 Leah	Leah	Leah	7	119
2 Leah	Leah	Leah	2	114.5
3 Leah	Leah	Leah	3	88.5
3 Leah	Leah	Leah	3	70
5 Leah	Leah	Leah	5	80
6 Leah	Leah	Leah	6	70.5
1 Leah	Leah	Leah	1	95
2 Leah	Leah	Leah	2	84.5
7 Leah	Leah	Leah	7	59.5
8 Leah	Leah	Leah	8	68.5
10 Leah	Leah	Leah	10	61.5
8 Leah	Leah	Leah	8	78.5
5 Leah	Leah	Leah	5	78
6 Leah	Leah	Leah	6	114.5
7 Leah	Leah	Leah	7	57.5
9 Leah	Leah	Leah	9	68.5
10 Leah	Leah	Leah	10	77.5
1 Leah	Leah	Leah	1	77
2 Leah	Leah	Leah	2	65.5
3 Leah	Leah	Leah	3	81
4 Leah	Leah	Leah	4	89
7 Leah	Leah	Leah	7	84.5
1 Leah	Leah	Leah	1	85
2 Leah	Leah	Leah	2	87.5
3 Leah	Leah	Leah	3	67
5 Leah	Leah	Leah	5	96
7 Leah	Leah	Leah	7	88.5
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9 Leah	Leah	Katie	9	101.5
10 Leah	Leah	Katie	10	106
9 Leah	Leah	Katie	9	72
10 Leah	Leah	Katie	10	78
1 Leah	Leah	Katie	1	31
2 Leah	Leah	Katie	2	88.5

5 Leah	Leah	Katie	5	132.5
6 Leah	Leah	Katie	6	75.5
7 Leah	Leah	Katie	7	92.5
8 Leah	Leah	Katie	8	81.5
1 Leah	Leah	Katie	1	64.5
2 Leah	Leah	Katie	2	77
12 Leah	Leah	Katie	12	70.5
3 Leah	Leah	Katie	3	79.5
4 Leah	Leah	Katie	4	64.5
9 Leah	Leah	Katie	7	72
10 Leah	Leah	Katie	8	68.5
11 Leah	Leah	Katie	9	73
12 Leah	Leah	Katie	10	64
5 Leah	Leah	Katie	5	109
6 Leah	Leah	Katie	6	124
5 Leah	Leah	Katie	5	89
6 Leah	Leah	Katie	6	76.5
7 Leah	Leah	Katie	7	77
8 Leah	Leah	Katie	8	60
13 Leah	Leah	Katie	9	66.5
8 Leah	Leah	Katie	10	77
7 Leah	Leah	Katie	5	118.5
8 Leah	Leah	Katie	6	72.5
3 Leah	Leah	Katie	1	77
4 Leah	Leah	Katie	2	98
11 Leah	Leah	Katie	11	63
2 Leah	Leah	Katie	12	72.5
5 Leah	Leah	Katie	3	75
6 Leah	Leah	Katie	4	62.5
10 Leah	Leah	Katie	8	83.5
12 Leah	Leah	Katie	13	57.5
12 Leah	Leah	Katie	14	54
7 Leah	Leah	Katie	7	87
8 Leah	Leah	Katie	8	99.5
3 Leah	Leah	Katie	3	75
4 Leah	Leah	Katie	4	47
1 Leah	Leah	Katie	1	78
2 Leah	Leah	Katie	2	75
5 Leah	Leah	Katie	5	83
6 Leah	Leah	Katie	6	84.5
5 Leah	Leah	Katie	5	89.5
6 Leah	Leah	Katie	6	72
1 Leah	Leah	Katie	1	76.5
6 Leah	Leah	Katie	6	98.5
8 Leah	Leah	Katie	8	85.5
9 Leah	Leah	Katie	9	108

7 Leah	Leah	Katie	7	132.5
1 Leah	Leah	Katie	1	118.5
2 Leah	Leah	Katie	2	102.5
7 Leah	Leah	Katie	7	74
8 Leah	Leah	Katie	8	87.5
3 Leah	Leah	Katie	3	62
4 Leah	Leah	Katie	4	54
5 Leah	Leah	Katie	5	74.5
3 Leah	Leah	Katie	3	77.5
4 Leah	Leah	Katie	4	71.5
9 Leah	Leah	Katie	9	70.5
10 Leah	Leah	Katie	10	19.5
1 Leah	Leah	Katie	1	99
2 Leah	Leah	Katie	2	77
11 Leah	Leah	Katie	11	70
12 Leah	Leah	Katie	12	76
3 Leah	Leah	Katie	3	56
4 Leah	Leah	Katie	4	62.5
5 Leah	Leah	Katie	5	81
6 Leah	Leah	Katie	6	85.5
7 Leah	Leah	Katie	7	88.5
8 Leah	Leah	Katie	8	72.5
9 Leah	Leah	Katie	9	78
10 Leah	Leah	Katie	10	83
11 Leah	Leah	Katie	11	76
12 Leah	Leah	Katie	12	78.5
11 Leah	Leah	Katie	11	96.5
12 Leah	Leah	Katie	12	70
3 Leah	Leah	Katie	3	91
4 Leah	Leah	Katie	4	81.5
5 Leah	Leah	Katie	5	74.5
6 Leah	Leah	Katie	6	84.5
7 Leah	Leah	Katie	7	63.5
8 Leah	Leah	Katie	8	81.5
1 Leah	Leah	Katie	1	100
2 Leah	Leah	Katie	2	89
9 Leah	Leah	Katie	9	61.5
10 Leah	Leah	Katie	10	90.5
11 Leah	Leah	Katie	11	66.5
12 Leah	Leah	Katie	12	50
3 Katie	Katie	Katie	3	96.5
4 Katie	Katie	Katie	4	78
5 Katie	Katie	Katie	5	101.5
6 Katie	Katie	Katie	6	110
9 Katie	Katie	Katie	9	57.5
10 Katie	Katie	Katie	10	55

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3	Leah	Leah	Katie	3	99.5
4	Leah	Leah	Katie	4	102
5	Leah	Leah	Katie	5	63
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8	Leah	Leah	Katie	8	NA
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6	Leah	Leah	Katie	6	67
7	Katie	Katie	Katie	7	88
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2	Katie	Katie	Katie	2	96
3	Katie	Katie	Katie	3	139.5
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9	Katie	Katie	Katie	9	73.5
10	Katie	Katie	Katie	10	80.5
11	Katie	Katie	Katie	11	44
12	Katie	Katie	Katie	12	74
5	Katie	Katie	Katie	5	86.5
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2	Leah	Leah	Katie	2	58.5

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7	Leah	Leah	Katie	7	71
8	Leah	Leah	Katie	8	65
1	Leah	Leah	Katie	1	73.5
2	Leah	Leah	Katie	2	73.5
10	Leah	Leah	Katie	10	86.5
11	Leah	Leah	Katie	11	60.5
12	Leah	Leah	Katie	12	72.5
3	Leah	Leah	Katie	3	53.5
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3	Leah	Leah	Katie	3	90
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11	Leah	Leah	Katie	11	116.5
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2	Leah	Leah	Katie	2	76.5
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3	Katie	Katie	Katie	3	72.5
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10	Leah	Leah	Katie	10	77.5
11	Leah	Leah	Katie	11	58.5
12	Leah	Leah	Katie	12	59.5
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11	Katie	Katie	Katie	11	97
7	Leah	Leah	Katie	7	103

8	Leah	Leah	Katie	8	117
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11	Leah	Leah	Katie	11	67.5
12	Leah	Leah	Katie	12	64.5
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6	Leah	Leah	Katie	6	66
7	Leah	Leah	Katie	7	71.5
8	Leah	Leah	Katie	8	76.5
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11	Leah	Leah	Katie	11	115.5
12	Leah	Leah	Katie	12	120.5
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3	Leah	Leah	Katie	3	104.5
4	Leah	Leah	Katie	4	112.5
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2	Katie	Katie	Katie	2	88
3	Katie	Katie	Katie	3	103.5
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11	Katie	Katie	Katie	11	95
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12	Leah	Leah	Katie	12	79.5
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7	Leah	Leah	Katie	7	71.5

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8 Leah	Leah	Katie	8	65.5
3 Leah	Leah	Katie	3	75
4 Leah	Leah	Katie	4	91.5
9 Leah	Leah	Katie	9	87.5
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11 Leah	Leah	Katie	12	97
5 Leah	Leah	Katie	5	54
6 Leah	Leah	Katie	6	68
1 Leah	Leah	Katie	1	74.5
2 Leah	Leah	Katie	2	87.5
9 Leah	Leah	Katie	9	67.5
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7 Leah	Leah	Katie	7	70.5
8 Leah	Leah	Katie	8	72.5
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2 Leah	Leah	Katie	2	75.5
3 Leah	Leah	Katie	3	72.5
4 Leah	Leah	Katie	4	73
5 Leah	Leah	Katie	5	77.5
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2 Leah	Leah	Katie	2	NA
11 Katie	Katie	Katie	11	NA
12 Katie	Katie	Nick	12	NA
12 Leah	Leah	Katie	12	55.5
11 Leah	Leah	Katie	11	NA
12 Leah	Leah	Katie	12	NA
5 Leah	Leah	Nick	5	NA
6 Leah	Leah	Nick	6	NA
3 Leah	Leah	Katie	3	NA
4 Leah	Leah	Katie	4	NA
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4 Leah	Leah	Katie	4	NA
1 Leah	Leah	Katie	1	NA
2 Leah	Leah	Katie	2	NA
6 Leah	Leah	Nick	6	NA
7 Leah	Leah	Nick	7	NA
8 Leah	Leah	Nick	8	NA
1 Katie	Katie	Katie	1	NA
2 Katie	Katie	Katie	2	NA
3 Katie	Katie	Katie	3	NA
4 Katie	Katie	Katie	4	NA
1 Leah	Leah	Katie	1	NA

2 Leah	Leah	Katie	2 NA
9 Leah	Leah	Nick	9 NA
13 Leah	Leah	Nick	10 NA
11 Leah	Leah	Katie	11 NA
12 Leah	Leah	Katie	12 NA
11 Leah	Leah	Katie	11 NA
12 Leah	Leah	Katie	12 NA
9 Leah	Leah	Nick	9 NA
13 Leah	Leah	Nick	10 NA
9 Katie	Katie	Katie	9 NA
5 Katie	Katie	Katie	5 NA
6 Katie	Katie	Katie	6 NA
7 Katie	Katie	Katie	7 NA
8 Katie	Katie	Katie	8 NA
7 Leah	Leah	Nick	7 NA
8 Leah	Leah	Nick	8 NA
5 Leah	Leah	Nick	5 NA
6 Leah	Leah	Nick	6 NA
5 Leah	Leah	Nick	5 NA
7 Leah	Leah	Nick	7 NA
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5 Leah	Leah	Katie	5 NA
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4 Leah	Leah	Nick	4 NA
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12 Leah	Leah	Katie	12 NA
11 Leah	Leah	Nick	11 NA
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3 Leah	Leah	Nick	3 NA
4 Leah	Leah	Nick	4 NA
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10 Leah	Leah	Katie	10 NA
5 Leah	Leah	Nick	5 NA
6 Leah	Leah	Katie	6 NA
5 Leah	Leah	Cary	5 NA
6 Leah	Leah	Cary	6 NA
7 Leah	Leah	Cary	7 NA
5 Leah	Leah	Nick	5 NA
6 Leah	Leah	Nick	6 NA
7 Leah	Leah	Katie	7 NA
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2 Leah	Leah	Nick	2 NA
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11 Leah	Leah	Katie	11 NA
3 Leah	Leah	Nick	3 NA
4 Leah	Leah	Nick	4 NA
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7 Leah	Leah	Katie	7 NA
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9 Leah	Leah	Cary	9 NA
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1 Leah	Leah	Katie	1 NA

2 Leah	Leah	Cary	2 NA
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4 Leah	Leah	Nick	4 NA
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3 Leah	Leah	Cary	3 NA
4 Leah	Leah	Cary	4 NA
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6 Leah	Leah	Cary	6 NA
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9 Leah	Leah	Katie	9 NA
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11 Leah	Leah	Katie	11 NA
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1 Leah	Leah	Nick	1 NA
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12 Leah	Leah	Nick	12 NA
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3 Leah	Leah	Nick	3 NA
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7 Leah	Leah	Katie	7	98.5
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3 Leah	Leah	Katie	3	72
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6 Katie	Katie	Katie	6	58

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6 Leah	Leah	Katie	6	101
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2 Leah	Leah	Katie	2	89
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8 Leah	Leah	Katie	8	98
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12 Leah	Leah	Katie	12	67
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2 Leah	Leah	Katie	2	79.5
7 Leah	Leah	Katie	7	76.5
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7	Katie	Katie	Katie	7	87.5
8	Katie	Katie	Katie	8	75.5
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9 Leah	Leah	Katie	9	95
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7 Leah	Leah	Katie	7	62
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4 Katie	Katie	Katie	4	81
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12	Katie	Katie	Katie	12	63.5
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5 Leah	Leah	Katie	5	80.5
6 Leah	Leah	Katie	6	86
7 Leah	Leah	Katie	7	102
8 Leah	Leah	Katie	8	79.5

TRIG	BWGain	BW	EpiFat	EpiFatg/BW	Gluc0	GluAUC
116	75	315	5.92	0.015179487	102	10702.5
68.5	40	339	5.11	0.01348285	108	12180
93	9	336	4.5	0.013043478	91	10207.5
56	-82	325	4.86	0.02	91	9667.5
90	25	302	4.43	0.013547401	89	12840
61.5	28	283	3.75	0.012057878	84	11812.5
85	15	364	6.87	0.018126649	90	12435
111	3	373	7.75	0.020611702	100	13132.5
73	2	298	4.58	0.015266667	96	11887.5
69.5	-92	378	3.35	0.011713287	85	11910
63.5	-12	389	3.7	0.009814324	87	10365
68	6	319	3.69	0.011353846	91	11520
111.5	16	329	3.84	0.011130435	90	10320
96.5	16	310	3.95	0.012116564	95	10042.5
71	9	348	3.76	0.010532213	94	13702.5
103.5	11	360	6.2	0.01671159	85	9585
66.5	4	336	3.05	0.008970588	92	10117.5
163	6	310	3.8	0.012025316	92	10897.5
115.5	4	298	4.57	0.01513245	98	9877.5
110.5	4	300	3.73	0.012269737	88	11317.5
55	11	315	4.07	0.012484663	81	10522.5
106	-5	310	3.73	0.012229508	83	10665
43.5	3	285	4.13	0.014340278	87	11265
59.5	2	285	3.39	0.011811847	83	9397.5
62.5	4	326	3.52	0.010666667	93	10905
62	6	255	3.63	0.013908046	85	8977.5
53	9	311	3.27	0.01021875	85	12292.5
57.5	-5	257	3.13	0.012420635	83	8827.5
63.5	0	298	NA	NA	91	10117.5
101.5	14	346	3.63	0.010083333	90	11152.5
83.5	-3	376	4.67	0.012520107	86	12202.5
193	6	360	6.35	0.017349727	97	12135
58.5	-7	355	3.25	0.00933908	87	12517.5
117.5	-3	334	3.74	0.011299094	88	12285
62.5	8	326	3.24	0.009700599	85	10117.5
68.5	11	384	5.64	0.014278481	91	9840
78	7	375	6.05	0.015837696	98	10477.5
110.5	12	388	8.14	0.02035	92	9742.5
90	11	367	5.74	0.015185185	91	12510
75.5	-1	394	9.34	0.023765903	90	11152.5
117	5	368	8.85	0.023726542	92	13852.5
45	3	352	4.81	0.013549296	88	13065
56.5	0	328	5.45	0.016615854	85	9345

55	10	353	5.07	0.013966942	80	8737.5
62.5	-7	352	19.12	0.05542029	92	9330
59	1	365	5.95	0.016256831	92	12307.5
60	4	374	4.75	0.012566138	84	11655
152	11	413	7.74	0.018254717	90	12855
110	10	345	5.84	0.016450704	99	12240
106.5	10	397	6.03	0.014815725	97	12292.5
169	-2	315	3.63	0.011597444	101	11932.5
114	10	349	6.1	0.016991643	99	11482.5
163	-1	354	4.68	0.01325779	98	11647.5
122	0	380	6.85	0.018026316	102	11805
130.5	1	373	6.05	0.016176471	97	11955
159.5	5	350	6.77	0.019070423	92	10642.5
92.5	3	356	5.55	0.01545961	87	11295
55.5	7	366	4.78	0.012815013	91	11557.5
48.5	2	327	3.28	0.009969605	91	9570
59	8	338	4.26	0.012312139	87	10995
73	14	362	5.22	0.013882979	92	11887.5
80.5	18	354	7.16	0.019247312	92	12585
115	7	410	8.05	0.019304556	94	13575
52.5	4	300	2.65	0.008717105	86	11955
70.5	9	291	4.23	0.0141	86	10650
67	2	302	4.09	0.013453947	86	10372.5
136.5	12	360	7.93	0.021317204	87	12675
96	15	360	6.29	0.016773333	90	13875
114.5	10	300	4.53	0.014612903	92	10822.5
127.5	9	310	6.91	0.021661442	90	11610
60.5	7	345	4.58	0.013011364	86	12427.5
208	0	315	5.72	0.01815873	104	10995
200	0	293	4.33	0.014778157	100	12142.5
102	6	348	5.51	0.015564972	98	11490
105.5	1	334	6.15	0.018358209	99	12997.5
88.5	-2	295	5.02	0.017133106	99	13305
89	-6	360	4.78	0.013502825	106	12577.5
120.5	7	350	5.92	0.016582633	95	14220
127.5	8	335	5.92	0.017259475	97	12292.5
168.5	9	360	6.05	0.016395664	93	9765
60.5	-3	315	2.52	0.008076923	76	10837.5
83.5	-2	310	3.8	0.012337662	88	11407.5
99	11	360	5.97	0.016091644	87	10815
128.5	13	330	7.13	0.020787172	94	11317.5
55.5	16	330	3.21	0.009277457	84	10132.5
49	0	325	3.21	0.009876923	78	10957.5
58.5	2	295	2.1	0.007070707	84	9952.5
73	7	346	4.91	0.013909348	88	11047.5
65.5	8	300	3.22	0.010454545	91	10762.5

81.5	2	300	3.2	0.010596026	77	8670
87.5	2	296	2.98	0.01	84	9757.5
70	-3	304	4.25	0.014119601	89	9967.5
89.5	8	379	6.96	0.017984496	96	12607.5
107	6	349	5.74	0.016169014	92	9937.5
111	-2	349	2.82	0.008126801	88	10522.5
68	4	354	3.83	0.010698324	98	13515
153	2	368	8.28	0.022378378	100	9922.5
129	0	354	5.87	0.016581921	100	12337.5
66.5	14	427	6.41	0.014535147	94	13230
214.5	10	448	8.28	0.018078603	107	13432.5
147.5	5	410	7.97	0.019204819	99	12675
80	7	384	5.34	0.013657289	103	14107.5
83	-8	346	5.93	0.017544379	96	10357.5
45	-1	335	4.25	0.012724551	87	11925
63.5	11	327	5.08	0.015029586	88	11077.5
83.5	15	368	4.56	0.011906005	86	11550
91.5	9	385	8.35	0.021192893	87	12870
55	9	308	3.64	0.01148265	93	10327.5
62.5	0	326	3.74	0.011472393	96	11557.5
136.5	9	293	3.3	0.010927152	92	9937.5
49.5	31	395	6.4	0.015023474	88	12255
75.5	12	324	4.14	0.012321429	89	10192.5
115	13	328	4.15	0.012170088	85	10447.5
71	8	275	2.05	0.007243816	91	10905
67	6	305	2.31	0.007427653	80	10597.5
54	5	340	3.77	0.010927536	79	9525
95	11	369	6.15	0.016184211	90	10950
149	2	424	8.73	0.020492958	88	12307.5
60.5	2	291	4.5	0.015358362	91	12945
67.5	8	295	4.84	0.015973597	92	11220
75	7	338	6.6	0.019130435	88	12037.5
102	2	316	3.6	0.011320755	85	10035
74	-1	324	4.1	0.012693498	93	9952.5
68	7	338	3.55	0.010289855	91	11970
43	15	339	3.32	0.009378531	89	9345
82.5	6	356	4.1	0.011325967	89	10170
152	11	410	7.19	0.017078385	96	11505
139.5	5	345	4.15	0.011857143	89	10635
150	11	353	5.48	0.015054945	88	10582.5
68.5	8	339	5.18	0.014927954	88	11985
51.5	15	355	3.76	0.010162162	99	11685
65.5	14	302	2.95	0.009335443	81	11152.5
84	5	407	6.18	0.015	77	10635
119.5	-4	421	5.91	0.014172662	96	12217.5
79.5	9	335	4.33	0.012587209	86	8302.5

131.5	-3	339	4.2	0.0125	104	11280
75	1	362	6.5	0.017906336	90	12600
103.5	6	305	4.25	0.013665595	93	12982.5
145.5	-3	368	7.27	0.019917808	96	11272.5
84.5	-38	385	6.25	0.018011527	86	9937.5
82	16	328	5.74	0.016686047	80	8737.5
110.5	27	410	11.75	0.026887872	90	12787.5
97	41	430	11.8	0.025053079	90	11325
52	6	308	4.06	0.012929936	78	9232.5
64.5	34	365	6.6	0.016541353	89	9705
84	5	320	5.45	0.016769231	69	10560
87.5	4	375	8	0.021108179	73	11040
91.5	69	329	5.98	0.015025126	83	10102.5
72.5	-1	320	5.23	0.016394984	79	9307.5
89	8	342	5.96	0.017028571	94	11265
75.5	-2	325	4.31	0.013343653	95	12532.5
93	12	325	5.41	0.016053412	83	12885
77.5	11	308	0.85	0.002664577	86	12352.5
72.5	-2	341	3.68	0.010855457	76	11902.5
78.5	3	317	4.23	0.01321875	82	11032.5
81	6	232	3.24	0.013613445	91	11137.5
75.5	5	277	6.01	0.021312057	89	11775
83.5	0	345	6.35	0.018405797	93	12187.5
68.5	-2	355	4.28	0.012124646	85	10020
47.5	4	303	3.45	0.011237785	80	10425
67.5	-1	308	7.4	0.024104235	75	9982.5
59.5	-3	319	4.95	0.015664557	77	9997.5
61	3	337	5.58	0.016411765	92	10927.5
75.5	8	311	5.97	0.018714734	86	10372.5
101	3	307	4.37	0.014096774	89	12060
103	15	320	5.32	0.015880597	92	12652.5
76.5	-4	369	3.89	0.010657534	78	10050
63.5	5	345	5.2	0.014857143	67	9562.5
66.5	2	363	6.33	0.017342466	69	9877.5
69.5	7	341	5.23	0.015028736	90	11437.5
71.5	9	376	5.01	0.013012987	90	9592.5
80	15	283	2.96	0.009932886	93	11760
69.5	12	353	4.5	0.012328767	85	11370
85	13	307	4.12	0.012875	92	11242.5
83.5	11	284	4	0.013559322	84	11340
84	10	278	4.51	0.015659722	83	12322.5
108	10	313	6.14	0.019009288	84	10462.5
92.5	-10	320	4.21	0.013580645	87	11925
87	-10	347	3.96	0.011750742	94	10410
88.5	14	375	7.07	0.018174807	91	12150
84	13	390	8.12	0.020148883	79	11317.5

101	20	393	8.11	0.019636804	83	10387.5
66.5	9	390	6.02	0.015087719	78	10447.5
85.5	14	388	7.72	0.01920398	84	9427.5
90.5	3	402	6.84	0.016888889	82	11565
78	-1	356	6.08	0.017126761	88	11385
86	7	353	6.28	0.017444444	79	10657.5
94.5	5	342	6.53	0.018818444	85	10740
113	15	375	9.34	0.023948718	83	9045
65.5	1	388	6.3	0.016195373	86	11625
67	-2	406	9.73	0.024084158	95	12622.5
100.5	-3	375	9.98	0.026827957	89	12600
93.5	10	405	6.9	0.016626506	82	12225
86.5	0	345	5.79	0.016782609	89	12412.5
95.5	7	349	6.63	0.018623596	92	11542.5
72.5	9	340	9.24	0.026475645	91	12360
69.5	8	400	7.34	0.017990196	89	11985
81	6	338	5.95	0.017296512	86	9870
69	6	365	5.7	0.015363881	81	9735
51	0	311	3.31	0.010643087	81	9495
56.5	3	279	3.22	0.01141844	93	11250
67	10	340	4.36	0.012457143	83	11850
91.5	2	292	4.83	0.016428571	90	11152.5
60	0	350	6.69	0.019114286	76	11010
72.5	6	403	8.8	0.021515892	82	11715
57	6	363	6.07	0.016449864	81	9382.5
64.5	0	381	5.42	0.014225722	83	9435
68.5	1	300	6.2	0.020598007	89	9780
98	8	402	9.83	0.02397561	86	11205
90	9	354	5.1	0.014049587	97	10852.5
72.5	7	347	6.29	0.017768362	85	11160
80.5	-1	383	6.01	0.015732984	87	10807.5
89	15	350	7.83	0.021452055	83	10095
82	9	402	9.99	0.024306569	84	10342.5
75.5	-1	335	7.45	0.022305389	94	11077.5
74.5	5	354	6.91	0.019247911	90	11602.5
81.5	6	353	8	0.022284123	88	12000
101.5	8	410	11.72	0.028038278	104	13087.5
93.5	0	378	7.46	0.01973545	87	12037.5
97.5	8	345	5.97	0.016912181	82	11137.5
102	-8	371	7.4	0.020385675	82	12180
66.5	7	365	7.18	0.019301075	79	9367.5
71	9	323	4.96	0.014939759	86	10852.5
71	2	375	6.01	0.015941645	86	11640
61.5	2	355	5.49	0.015378151	82	10665
97.5	-2	356	4.43	0.012514124	80	9667.5
94.5	5	355	4.07	0.011305556	81	9652.5

97	-4	295	3.97	0.013642612	83	11265
80.5	3	326	4.48	0.013617021	82	8595
115	4	348	4.93	0.014005682	83	9720
105.5	3	328	6.05	0.018277946	93	12060
84	6	385	5.19	0.013273657	100	11782.5
123.5	7	352	4.22	0.011754875	97	11362.5
72	1	362	6.21	0.017107438	84	10740
77.5	8	388	5.23	0.013207071	90	10267.5
59.5	12	328	4.86	0.014294118	80	10425
80.5	8	302	5.3	0.017096774	86	11062.5
92.5	9	353	4.89	0.013508287	87	15780
95.5	8	303	4.48	0.014405145	87	9900
66	8	329	5.3	0.015727003	89	9637.5
89	4	349	6.62	0.018753541	89	12225
74	-3	383	7.86	0.020684211	84	11587.5
76	7	384	4.53	0.011585678	87	11512.5
68.5	-5	360	4.83	0.013605634	79	10905
79.5	-3	306	3.27	0.010792079	88	10530
94.5	10	319	6.01	0.018267477	77	9307.5
81.5	10	326	6.53	0.019434524	84	9930
64.5	10	325	7.44	0.022208955	88	11445
76.5	17	305	5.58	0.017329193	84	11677.5
97	19	314	4.18	0.012552553	79	10530
71.5	11	326	5.35	0.015875371	77	12435
59.5	12	281	2.34	0.007986348	88	9480
70	6	285	3.11	0.010687285	84	9502.5
68	12	263	1.99	0.007236364	82	9772.5
79.5	3	317	6.14	0.0191875	92	12375
84	0	273	4.82	0.017655678	81	11467.5
70.5	7	345	4.14	0.011761364	81	11767.5
86	3	402	5.67	0.014	85	13755
107.5	10	325	5.25	0.015671642	91	11220
102	6	334	4	0.011764706	78	9960
118.5	5	357	5.42	0.014972376	93	10245
122	15	376	5.54	0.014168798	86	10012.5
113.5	5	290	3.71	0.012576271	88	9525
96.5	11	275	3.45	0.012062937	88	10455
91.5	11	434	8.77	0.019707865	88	14497.5
73	12	333	3.84	0.011130435	86	10522.5
58	19	391	5.35	0.01304878	82	9967.5
69.5	22	443	8.9	0.019139785	77	11700
70	7	292	3.76	0.012575251	91	11685
80.5	8	345	4.8	0.013597734	84	10590
66	11	330	2.68	0.007859238	90	9720
57	15	359	6.75	0.018048128	91	13717.5
69.5	13	300	4.46	0.014249201	84	9315

64	6	291	3.38	0.011380471	69	11580
64	1	321	3.92	0.012173913	87	10335
70.5	3	303	3.27	0.010686275	95	12405
93.5	0	314	3.48	0.011082803	87	11070
99.5	1	383	5.51	0.014348958	88	11880
75.5	7	344	4.03	0.011481481	90	10410
91	6	338	4.65	0.013517442	89	10282.5
62	0	338	4.13	0.012218935	85	10312.5
75.5	4	412	8.68	0.020865385	89	13267.5
49.5	8	286	2.22	0.00755102	74	8805
60.5	2	304	4.84	0.015816993	81	10380
83.5	2	296	3.09	0.010369128	75	9795
109.5	6	295	5.55	0.018438538	91	11040
87.5	-7	314	3.97	0.012931596	84	12150
98	5	320	6.1	0.018769231	102	11947.5
97.5	10	323	5.86	0.017597598	89	11910
91	-4	314	4.16	0.013419355	90	11602.5
63	-7	324	3.52	0.011104101	74	10582.5
102.5	8	329	7.69	0.022818991	89	10717.5
97	6	316	5.07	0.015745342	86	10590
84.5	1	325	6.4	0.019631902	84	9660
97.5	9	393	8.34	0.020746269	85	10605
126	7	338	5.1	0.014782609	95	9157.5
124	-3	362	4.15	0.011559889	92	9495
80.5	-2	308	5.41	0.017679739	85	13200
65.5	3	265	2.89	0.010783582	82	9997.5
68.5	3	353	4.81	0.013511236	78	10072.5
56.5	-3	348	3.92	0.011362319	73	11595
84.5	4	316	4.75	0.01484375	90	13260
103.5	-4	326	3.12	0.009689441	90	10215
78	4	303	2.6	0.008469055	80	9465
60	11	395	7.99	0.019679803	77	10455
73.5	5	374	6.01	0.01585752	82	9690
107.5	8	343	5.66	0.016125356	94	11362.5
100	9	335	4.17	0.012122093	85	11295
60.5	-5	314	4.21	0.013624595	84	9952.5
62.5	-1	373	3.85	0.010349462	77	10080
52	-4	363	3.93	0.010947075	80	10230
86.5	24	307	3.47	0.010483384	86	9772.5
94.5	14	303	3.97	0.012523659	84	11160
54	4	341	3.38	0.009797101	87	11782.5
80.5	4	356	3.76	0.010444444	83	11947.5
90.5	15	362	4.75	0.012599469	87	13050
47.5	14	322	2.63	0.007827381	79	11017.5
91	19	328	4.11	0.01184438	81	10455
101.5	8	313	3.93	0.012242991	86	11205

101	9	332	3.52	0.010322581	85	11272.5
79.5	20	344	4.51	0.01239011	84	11557.5
67	16	329	6.14	0.017797101	87	10102.5
74	14	360	4.77	0.012754011	87	10507.5
99	13	303	2.72	0.008607595	85	11910
96	3	311	4.91	0.015636943	82	10755
34	6	285	3.47	0.011924399	80	8302.5
28.5	7	314	5.53	0.017227414	82	8932.5
108.5	11	397	6.1	0.01495098	91	10387.5
89	11	351	4.48	0.012375691	88	10777.5
93.5	9	322	5.09	0.015377644	91	10507.5
99	11	369	5.05	0.013289474	105	13080
83.5	6	285	4.4	0.015120275	89	10732.5
111	3	299	4.38	0.014503311	92	10417.5
93	18	274	2.67	0.009143836	75	9832.5
120	-3	380	1.07	0.002838196	84	10065
112	-3	381	7.26	0.019206349	82	11385
97	-5	316	5.18	0.016655949	94	10470
99.5	9	318	4.79	0.014648318	83	11730
73.5	7	328	6.34	0.018925373	80	9832.5
87.5	26	306	5.71	0.017198795	84	13230
73.5	7	343	3.77	0.010771429	77	10140
83	5	345	5.99	0.017114286	93	10890
115.5	3	392	6.15	0.01556962	81	13710
87.5	3	335	3.94	0.011656805	76	9562.5
81	8	266	3.42	0.012481752	87	9412.5
95	17	396	6.92	0.016755448	97	10852.5
97.5	10	403	8.84	0.021404358	85	10987.5
84.5	13	369	5.83	0.01526178	82	10102.5
96	-2	373	6.84	0.018436658	85	10672.5
78.5	2	385	9.46	0.024444444	70	11400
60	8	322	4.33	0.013121212	83	8670
102.5	5	314	4.86	0.01523511	78	10012.5
73	4	343	4.96	0.014293948	79	9907.5
73	6	384	5.7	0.014615385	82	9577.5
93	5	395	8.01	0.020025	87	9585
76	11	314	6.04	0.018584615	90	10350
108	5	335	5	0.014705882	87	12307.5
86.5	14	302	3.78	0.011962025	82	12277.5
84.5	4	375	6.07	0.016015831	80	13785
90.5	5	378	6.49	0.01694517	79	9795
32	7	316	3.49	0.010804954	71	7800
69.5	-6	343	3.67	0.010890208	80	8347.5
77	10	345	3.74	0.010535211	73	9645
77.5	-1	310	3.61	0.011682848	80	10140
75.5	11	295	4.35	0.014215686	84	11745

87	3	322	5.99	0.018430769	80	11295
99	16	384	4.09	0.010225	82	9675
79	9	295	3.89	0.012796053	73	9172.5
78.5	6	340	4.85	0.014017341	69	9847.5
68	0	291	3.81	0.013092784	67	9030
57.5	11	333	4.82	0.014011628	72	8887.5
57	6	399	4.3	0.010617284	75	8467.5
81.5	13	371	8.09	0.021067708	98	10440
95	13	362	4.58	0.012213333	89	12322.5
60.5	5	285	3.64	0.012551724	78	8670
62.5	-2	343	4.36	0.012785924	77	8685
60	6	314	4.78	0.0149375	69	8317.5
63.5	3	344	5.38	0.015504323	76	10447.5
99	0	350	3.49	0.009971429	90	10102.5
161	4	357	5.93	0.016426593	90	11122.5
156.5	1	322	4.37	0.013529412	92	11010
78.5	2	341	6.16	0.017959184	99	14910
75.5	-1	341	3.57	0.0105	80	9037.5
73.5	3	323	7.73	0.023711656	72	8827.5
76.5	6	341	6.82	0.019654179	83	9847.5
53	3	290	4.78	0.016313993	72	8902.5
63	4	339	8.63	0.02516035	77	9525
59.5	5	309	4.36	0.01388535	71	9795
77	-4	353	3.62	0.010372493	72	10695
98	0	297	2.57	0.008653199	79	10890
103.5	4	325	4.29	0.013039514	80	11775
101.5	-5	280	3.61	0.013127273	82	11572.5
87	3	304	2.72	0.008859935	75	9997.5
97	0	382	9.94	0.026020942	82	12270
65	9	320	3.17	0.009635258	71	9540
82.5	7	346	4.97	0.01407932	77	10207.5
68	5	350	5.51	0.015521127	79	10740
71	10	347	4.4	0.01232493	93	10702.5
72	-1	338	5.16	0.015311573	78	10350
110	7	356	5.1	0.014049587	80	9967.5
126.5	11	388	7.8	0.019548872	78	9862.5
67.5	0	334	2.95	0.008832335	95	13965
66	0	331	3.99	0.012054381	89	12442.5
100.5	9	368	5.94	0.015755968	82	10717.5
66.5	7	360	7	0.019073569	81	10027.5
74	14	375	7.73	0.019871465	89	12165
72	6	410	8.38	0.020144231	83	10597.5
85	9	301	3.38	0.010903226	77	11227.5
64	13	322	4.73	0.014119403	82	11272.5
91.5	8	355	5.37	0.014793388	79	11520
106.5	9	406	8.96	0.021590361	92	14287.5

73.5	-3	329	3.89	0.011932515	84	10792.5
91	3	324	6.72	0.020550459	90	12150
97	0	365	7.32	0.020054795	84	9487.5
105	0	350	5.44	0.015542857	85	10627.5
104.5	11	341	4.28	0.012159091	83	11700
87	7	301	2.39	0.00775974	84	9772.5
69.5	6	317	3.21	0.00993808	81	12255
108.5	-5	337	5.2	0.015662651	88	14497.5
54.5	9	328	2.47	0.007329377	82	12015
68.5	5	300	3.8	0.012459016	97	12315
67	0	339	4.16	0.012271386	92	11115
23	-2	294	3.29	0.011267123	72	8287.5
80.5	24	345	6.86	0.018590786	89	11212.5
108.5	3	360	5.07	0.013966942	90	10702.5
107.5	4	424	7.32	0.017102804	85	10770
92.5	10	325	5.8	0.017313433	78	11377.5
68	22	312	5.22	0.015628743	82	10380
76	2	351	5.33	0.01509915	90	11122.5
63.5	10	332	6.69	0.019561404	78	10485
66	10	284	4	0.013605442	78	11737.5
96	15	395	7.8	0.01902439	101	10710
78	9	334	4	0.011661808	93	10485
81.5	11	280	2.32	0.007972509	89	11317.5
89.5	15	345	4.41	0.01225	87	11535
129.5	17	372	6.95	0.017866324	78	10342.5
69.5	1	309	4.39	0.01416129	76	8377.5
57	7	328	4.14	0.012358209	78	9277.5
57	10	331	4.87	0.014281525	84	8595
80	4	317	5.39	0.016791277	79	9090
66	2	315	4.86	0.01533123	90	9255
73	4	343	6.69	0.019279539	76	12150
73.5	3	368	6.87	0.01851752	88	13260
86.5	7	297	2.96	0.009736842	81	9105
97.5	9	324	4.42	0.013273273	93	10447.5
143.5	10	304	4.04	0.012866242	87	9465
107.5	5	335	4.98	0.014647059	81	10035
105.5	18	360	5.2	0.013756614	84	10252.5
109	5	382	8.17	0.021111111	82	12682.5
87.5	-2	405	5.6	0.013895782	78	12022.5
111.5	5	395	4.58	0.01145	83	11137.5
90	12	280	2.29	0.007842466	91	9870
92	13	340	4.19	0.011869688	80	12420
76	3	317	4.27	0.01334375	93	11917.5
75.5	2	371	6.54	0.017533512	96	13972.5
71.5	9	274	4.94	0.01745583	79	11617.5
77.5	7	273	7.03	0.025107143	72	9285

73.5	1	283	3.46	0.012183099	72	8955
85	0	285	3.41	0.011964912	70	10492.5
80	3	310	2.91	0.009297125	69	9112.5
71.5	1	297	4.28	0.014362416	73	8737.5
76.5	-1	348	6.24	0.017982709	83	10785
57	6	317	2.94	0.009102167	78	9075
79	14	355	4.35	0.011788618	81	9727.5
59.5	4	350	3.46	0.009774011	70	8655
66.5	8	343	4.28	0.012193732	83	9517.5
52	0	335	4.2	0.012537313	80	10095
90.5	5	363	19.1	0.051902174	87	13185
72.5	2	345	4.55	0.013112392	90	10177.5
87	0	405	9.7	0.023950617	90	12420
97	-3	340	6.69	0.019851632	87	12922.5
72	7	347	4.37	0.012344633	90	10807.5
73	5	334	4.68	0.01380531	98	10275
97.5	5	387	6.55	0.016709184	94	10680
100.5	2	331	4.49	0.013483483	88	10507.5
90.5	7	362	5.58	0.015121951	89	10410
78.5	3	328	4.3	0.012990937	89	10470
56.5	-3	365	5.26	0.014530387	85	14070
60	7	331	6.2	0.018343195	88	12390
88	3	359	6.74	0.018618785	81	12097.5
80	2	313	5.4	0.017142857	75	10462.5
54.5	6	280	2.55	0.008916084	85	9285
71.5	11	254	2.67	0.010075472	85	11610
56.5	-1	252	2.17	0.008645418	80	9195
85	-4	394	7.16	0.018358974	85	11512.5
84	2	341	5.3	0.015451895	82	9615
20	-4	309	3.06	0.010032787	91	11332.5
54	4	395	5.17	0.012957393	81	12637.5
102.5	-1	363	9.06	0.025027624	86	11550
89.5	5	350	6.51	0.018338028	82	13822.5
91.5	13	380	5.94	0.015114504	79	10485
88	15	345	4.53	0.012583333	79	10942.5
93	6	328	4.73	0.014161677	89	10162.5
113.5	4	353	4.72	0.013221289	90	10530
128.5	2	347	3.72	0.010659026	94	11700
135	-3	368	4.95	0.013561644	94	13747.5
89	13	320	3.88	0.011651652	87	11482.5
122	10	317	3	0.009174312	81	10657.5
100	13	355	4.86	0.013206522	84	9255
105	1	340	4.79	0.014046921	90	10012.5
88.5	11	327	5.56	0.016449704	71	11535
115.5	-1	295	3.65	0.012414966	86	10732.5
78.5	0	332	4.36	0.01313253	74	11962.5

72.5	2	360	4.5	0.012430939	85	12000
106.5	9	343	4.31	0.012244318	89	10170
81	6	307	2.15	0.00686901	84	9510
109	9	424	6.81	0.015727483	84	11295
176	11	391	9.6	0.023880597	93	12187.5
126.5	6	313	3.03	0.009498433	84	10672.5
97.5	5	340	4.32	0.012521739	81	10845
94.5	1	342	3.27	0.009533528	79	14475
95	7	356	6.68	0.018402204	78	11182.5
93.5	10	340	3.55	0.010142857	86	9795
140	14	342	3.92	0.011011236	87	11137.5
58.5	0	322	3.26	0.010124224	92	9802.5
62.5	4	319	5.96	0.018452012	88	12652.5
70	2	292	4.07	0.013843537	88	10942.5
83.5	11	284	3.99	0.013525424	87	13747.5
86	7	306	4.4	0.014057508	97	12532.5
127	0	337	7.88	0.023382789	84	12945
79.5	7	362	5.06	0.013712737	78	12120
39	5	279	2.92	0.01028169	82	9067.5
95.5	1	362	4.35	0.011983471	95	10080
76	-3	287	3.58	0.012605634	94	10515
124.5	6	341	5.06	0.014582133	89	10297.5
75	-4	368	5.34	0.01467033	90	10702.5
67	8	400	6	0.014705882	85	12337.5
64	-3	390	5.38	0.013901809	79	11790
150.5	7	391	6.97	0.017512563	88	10755
90.5	3	316	5.44	0.017053292	85	12135
144	5	325	4.67	0.014151515	87	10320
92.5	-8	391	6.67	0.017415144	87	10290
67.5	9	370	4.85	0.012796834	89	12615
80.5	4	319	5.04	0.015603715	89	12067.5
124	0	399	6	0.015037594	89	12885
130	-5	345	5.62	0.016529412	82	9435
168	6	368	3.84	0.01026738	81	8632.5
121.5	6	382	4.59	0.011829897	81	8632.5
163.5	-3	304	2.52	0.008372093	83	12547.5
154	0	274	4.15	0.015145985	87	11580
113.5	7	300	3.91	0.012736156	84	9900
77.5	5	286	3.37	0.011580756	81	9352.5
76.5	12	278	3.43	0.011827586	93	10635
77	3	292	3.8	0.012881356	87	10320
94	8	322	3.91	0.011848485	92	10845
111	4	340	4.72	0.01372093	85	10042.5
195.5	5	353	5.86	0.016368715	91	10215
251.5	7	278	3.62	0.012701754	88	11310
157.5	-1	323	3.75	0.011645963	81	11925

104.5	3	344	3.38	0.009740634	84	10597.5
63.5	-4	351	4.93	0.014207493	86	11700
77.5	-1	374	5.47	0.014664879	82	10410
138	-1	400	10.25	0.025689223	89	10762.5
91.5	-8	353	7.46	0.021623188	80	9375
65	-2	316	3.31	0.010541401	93	12727.5
121.5	-5	319	3.4	0.010828025	84	10260
157	-6	307	4.41	0.014651163	77	9442.5
142	4	306	6.28	0.020258065	83	11115
174.5	-2	301	5.87	0.019632107	81	10830
189	2	345	6.85	0.019740634	85	10027.5
138	9	354	4.8	0.01322314	83	10425
120	6	350	4.7	0.013202247	83	10305
102	7	322	3.47	0.010547112	89	9142.5
84.5	-4	387	6.32	0.016501305	87	9705
186	3	425	10.11	0.023621495	84	10582.5
225.5	0	380	6.95	0.018289474	86	12120
116.5	-4	364	7.63	0.021194444	90	9352.5
169.5	-3	328	4.82	0.014830769	86	9472.5
108	-10	295	3.58	0.012561404	85	9810
254.5	-2	257	3.63	0.014235294	91	11497.5
80.5	-2	350	4.3	0.012356322	73	8227.5
75	11	341	3.58	0.010170455	77	8655
67	8	331	3.77	0.011120944	75	8730
116.5	9	316	4.45	0.013692308	87	8340
131.5	3	371	4.17	0.011149733	84	10492.5
274.5	0	381	6.91	0.018136483	94	10192.5
166	3	323	5.84	0.01791411	84	10605
119.5	2	307	5.64	0.018252427	75	12892.5
131.5	8	270	5.52	0.019856115	88	10822.5
70	0	329	6	0.018237082	86	10275
114.5	0	345	4.95	0.014347826	76	8850
172.5	0	277	3.24	0.011696751	86	11272.5
144.5	7	335	5.3	0.015497076	85	9585
128	4	403	6.14	0.015085995	86	12645
149	3	317	5.09	0.01590625	79	11115
153.5	7	316	5.22	0.016160991	87	10815
175	9	317	6.25	0.019171779	93	11512.5
107	4	365	4.54	0.012303523	73	10365
82.5	2	319	2.88	0.008971963	81	10725
150.5	4	301	3.91	0.012819672	87	10717.5
90.5	-7	312	3.5	0.01147541	88	12135
117	7	300	2.97	0.009674267	74	8332.5
140	11	317	2.66	0.008109756	82	8445
168.5	6	271	3.34	0.012057762	86	9637.5
140.5	8	320	4.69	0.01429878	95	10215

142	6	363	3.92	0.010623306	75	10252.5
89	18	353	4.03	0.010862534	76	14565
77	5	347	5.47	0.015539773	79	11415
301.5	3	322	6.03	0.018553846	85	10567.5
185	12	431	9.71	0.021918736	94	10065
103.5	10	361	6.11	0.016469003	74	8497.5
154.5	14	391	6.11	0.01508642	83	11610
73	-3	311	4.41	0.014318182	81	9765
65	1	325	4.49	0.013773006	85	11227.5
102.5	1	295	4.01	0.013547297	90	12652.5
129.5	2	275	4.6	0.016606498	74	10080
99.5	-1	253	3.82	0.01515873	84	12060
101	-8	312	4.93	0.016217105	90	13305
130.5	1	347	4.13	0.011867816	87	8542.5
190	1	357	4.69	0.013100559	83	12675
163	1	353	7.84	0.022146893	88	11055
97.5	5	349	5.56	0.015706215	88	10372.5
150	3	464	9.61	0.020578158	87	11265
148	3	453	10.7	0.023464912	91	11385
73	2	319	3.77	0.011744548	73	11977.5
80	9	322	4.99	0.015075529	77	9270
212	5	357	6.94	0.019171271	86	10560
167.5	5	295	4.21	0.014033333	86	12465
118	9	353	6.2	0.017127072	92	13102.5
159	15	337	3.56	0.010113636	99	13905
144	8	313	6.51	0.020280374	92	11617.5
318	19	329	6.95	0.019971264	92	11625
140.5	-2	332	5.05	0.01530303	98	12420
112	5	309	5.52	0.017579618	87	11302.5
96.5	7	356	4.67	0.012865014	78	10282.5
45	6	332	3.9	0.011538462	76	8887.5
67.5	12	325	3.4	0.010089021	76	9870
156	12	359	5.76	0.015525606	89	10087.5
260	19	356	5.49	0.01464	87	8962.5
92	16	350	6.17	0.016857923	92	9397.5
155.5	8	356	5.98	0.016428571	83	11317.5
87	8	385	6.19	0.015750636	90	9772.5
59.5	25	377	6.28	0.015621891	79	10462.5
138	11	224	3.7	0.015744681	94	9765
108	6	274	3.07	0.010964286	87	10950
164.5	-2	314	6.25	0.020032051	93	11040
121	7	291	4.23	0.014194631	82	10672.5
101	13	353	4.98	0.013606557	81	8392.5
177.5	-1	411	8.37	0.020414634	90	14182.5
61	8	336	3.03	0.00880814	75	8220
98.5	9	345	3.44	0.009717514	87	8535

110	-2	367	4.17	0.011424658	76	11632.5
428.5	11	400	7.6	0.018491484	89	10462.5
222	14	345	5.01	0.013955432	87	10425
96.5	2	385	7	0.018087855	85	9877.5
82.5	-4	417	10.25	0.024818402	88	10567.5
43.5	7	322	4.42	0.01343465	92	8775
61	7	344	5.85	0.016666667	87	9457.5
68	-1	293	4.09	0.014006849	82	9487.5
115.5	-3	348	5.82	0.016869565	91	11655
135.5	6	366	5.94	0.015967742	91	11010
130.5	3	394	4.39	0.011057935	87	11895
149	0	202	1.17	0.005792079	70	8737.5
86	-7	329	4.39	0.01363354	87	9300
44.5	0	354	7.44	0.021016949	79	11070
64.5	8	349	3.94	0.011036415	86	9082.5
81.5	7	385	6.89	0.017576531	90	9532.5
57.5	-2	317	3.11	0.009873016	85	9990
67.5	-6	218	4.29	0.020235849	81	10320
102.5	5	304	6.35	0.020550162	83	11715
94.5	2	311	6.66	0.021277955	90	10620
129	4	298	5.2	0.017218543	84	9427.5
137.5	4	336	7.49	0.022029412	82	10350
116	9	326	5.67	0.016925373	87	8737.5
122	21	351	5.52	0.01483871	100	10897.5
65.5	5	340	7.6	0.022028986	87	10462.5
116.5	1	269	2.59	0.009592593	87	9630
70.5	2	377	6.7	0.0176781	92	13890
62	5	294	3.32	0.011103679	87	10612.5
126	-2	294	4.4	0.015068493	87	8977.5
99	-1	321	5.04	0.01575	96	10650
115.5	9	320	3.2	0.009726444	82	8865
164	8	353	4.9	0.013573407	88	10140
95	13	332	5.86	0.016985507	92	10380
112.5	7	330	6.1	0.01810089	97	11362.5
248	6	403	6.44	0.015745721	95	11880
189.5	4	375	6.69	0.017651715	87	10522.5
84.5	7	276	5.61	0.019823322	87	11100
162	-2	327	6.48	0.019938462	99	12007.5
113.5	5	324	4.4	0.01337386	93	12082.5
57	1	241	2	0.008264463	94	12405
74	11	354	7.78	0.021315068	81	8977.5
64	-7	341	5.28	0.015808383	68	12705
150	11	324	4.95	0.014776119	95	11287.5
149	6	329	4.06	0.012119403	91	12532.5
110.5	-2	343	5.57	0.016334311	74	11460
75	0	301	4.36	0.01448505	81	12232.5

151.5	10	266	2.58	0.009347826	86	14235
157	3	392	6.77	0.017139241	89	13425
112.5	8	340	4.84	0.013908046	89	13770
99	7	303	4.3	0.013870968	91	10642.5
54	3	331	3.32	0.00994012	87	10867.5
105	14	348	6.4	0.017679558	92	9735
131	14	352	5.41	0.014781421	91	9615
75.5	5	348	4.45	0.012606232	90	10710
58	7	345	5.23	0.014857955	91	12240
84	13	362	5.74	0.015306667	96	10012.5
132.5	3	354	4.8	0.013445378	100	9900
53	8	264	3.71	0.013639706	82	8355
89	7	306	4.53	0.014472843	84	10057.5
142.5	19	388	8.25	0.02027027	84	11355
168.5	24	402	8.65	0.020305164	84	12540
126	10	299	4.45	0.014401294	78	8287.5
NA	5	365	6.21	0.016783784	87	11077.5
71	8	290	3.23	0.010838926	71	9112.5
232.5	6	341	5.03	0.014495677	89	10672.5
174.5	5	294	5.13	0.017157191	87	10822.5
NA	4	323	4.57	0.013975535	83	10462.5
NA	-9	365	6.09	0.017106742	82	10815
89	13	323	8.58	0.025535714	85	10357.5
138	7	299	7.03	0.022973856	82	12967.5
115	8	378	8.11	0.021010363	90	10447.5
61	6	374	6.46	0.017	93	10740
107	7	340	4.68	0.013487032	87	11265
100	5	345	5.78	0.016514286	88	9952.5
225	7	333	1.33	0.003911765	90	12270
114	5	332	4.25	0.012611276	92	10702.5
86.5	11	322	3.58	0.010750751	91	8595
101	-7	265	3.92	0.015193798	98	11152.5
72.5	4	341	4.05	0.01173913	84	10327.5
143.5	2	360	8.65	0.023895028	86	10035
52.5	1	256	3.77	0.014669261	84	10897.5
188	4	325	6.23	0.01893617	81	9975
189.5	-1	277	4.3	0.01557971	98	9757.5
202	8	320	4.99	0.015213415	107	12195
115.5	3	328	3.7	0.011178248	85	9855
96	6	340	3.76	0.010867052	82	9855
200.5	-2	363	8.2	0.022714681	76	10635
79	-105	344	5.08	0.02125523	87	9937.5
42	1	374	4.53	0.01208	79	9990
144.5	1	356	4.96	0.013893557	84	11715
143	7	303	5.47	0.017645161	90	10717.5
89	0	292	2.87	0.009828767	87	12472.5

107.5	-3	335	5.33	0.016054217	86	10747.5
95.5	3	360	6.2	0.01707989	94	10297.5
104.5	4	359	6.72	0.018512397	75	11730
65.5	4	343	7.39	0.02129683	79	9045
171.5	9	334	7.1	0.020699708	87	9885
90	3	307	4.23	0.013645161	92	10327.5
118.5	-5	365	6.43	0.017861111	79	8925
45	0	370	3.44	0.009297297	84	10777.5
140.5	10	340	7.17	0.020485714	87	10102.5
47	6	300	2.58	0.008431373	82	9667.5
77	6	284	3.8	0.013103448	70	8767.5
71	0	280	2.7	0.009642857	71	9615
93.5	3	292	2.51	0.008508475	74	9870
164.5	4	384	6.23	0.016056701	92	14685
131	6	329	5.19	0.015492537	79	9457.5
152.5	12	331	4.16	0.01212828	87	10897.5
77	3	270	2.02	0.007399267	87	9817.5
106	7	346	6.59	0.018668555	85	8572.5
151.5	8	345	4.33	0.012266289	91	11925
NA	NA	297	NA	NA	78	9637.5
120	7	311	4.56	0.014339623	87	10447.5
84.5	-1	282	4.29	0.015266904	85	10485
91.5	2	263	3.33	0.012566038	86	9697.5
77.5	-8	300	3.5	0.011986301	83	12967.5
50.5	5	320	4.9	0.015076923	78	12442.5
43	6	422	5.3	0.012383178	92	12315
NA	-1	381	5.48	0.014421053	83	11752.5
201.5	14	380	5.94	0.015076142	85	12510
178.5	3	393	6.84	0.017272727	82	13470
102	7	288	3.22	0.010915254	86	9967.5
118	6	310	4.5	0.014240506	78	8880
70.5	11	306	3.85	0.01214511	73	9712.5
102.5	1	322	7.97	0.024674923	81	9495
95	-5	327	6.84	0.021242236	76	10215
85.5	7	331	6.26	0.01852071	76	9060
87	3	340	4.36	0.01271137	71	9277.5
231.5	0	326	3.77	0.011564417	77	9030
112.5	6	345	3.12	0.008888889	85	8632.5
49	8	332	4.31	0.012676471	76	9007.5
70	2	368	7.75	0.020945946	74	10942.5
60.5	7	283	4.91	0.016931034	69	8355
58.5	8	295	3.35	0.011056106	71	8317.5
100.5	12	261	4.07	0.014908425	83	9645
98.5	9	301	5.62	0.018129032	88	12337.5
122.5	1	293	3.3	0.01122449	70	9532.5
141.5	-4	397	9.09	0.023129771	75	10957.5

173	3	379	6.44	0.016858639	82	9435
73	16	322	4.63	0.013698225	87	9637.5
163.5	11	341	6.04	0.017159091	84	9112.5
92	-3	363	5.37	0.014916667	80	10365
74	0	360	5.19	0.014416667	81	9600
172.5	3	363	7.35	0.020081967	95	14310
72	-3	334	5.74	0.01734139	88	10800
47.5	-1	336	4.15	0.01238806	89	11610
35.5	4	327	3.24	0.00978852	82	12975
102	3	307	5.12	0.016516129	97	12577.5
120	-5	325	6.61	0.02065625	102	12457.5
151	0	366	5.86	0.016010929	119	15562.5
184.5	4	343	6.8	0.019596542	93	10822.5
232.5	3	392	6.46	0.01635443	100	12097.5
183.5	5	343	6.91	0.019856322	88	10297.5
186.5	-4	390	8.66	0.022435233	87	13747.5
76	5	298	3.12	0.01029703	87	10335
70	-3	313	5.02	0.016193548	91	11550
97	-1	333	5.63	0.016957831	84	10027.5
NA	1	319	7.67	0.02396875	86	12007.5
130.5	7	354	4.06	0.011246537	100	12165
137.5	-1	344	6.58	0.019183673	77	12322.5
220.5	2	393	19.19	0.048582278	82	9472.5
195.5	5	360	5.48	0.015013699	74	11985
230.5	2	372	6.63	0.017727273	79	11707.5
122	5	345	4.83	0.0138	94	11632.5
118.5	3	429	7.1	0.016435185	75	10447.5
123	6	363	5.78	0.015663957	85	10320
85	4	363	5.52	0.015040872	85	9645
118	5	374	5.3	0.013984169	87	10492.5
86.5	7	286	2.53	0.008634812	86	10117.5
68	10	334	2.47	0.007180233	79	11625
60	9	323	3.54	0.010662651	84	10642.5
110	1	309	3.81	0.012290323	93	12465
75	-4	290	3.23	0.011293706	82	10597.5
105.5	-1	298	3.63	0.012222222	77	9015
51.5	6	341	3.74	0.010778098	75	11025
128.5	2	372	7.84	0.020962567	86	10807.5
180.5	10	378	6.88	0.017731959	85	12757.5
56.5	7	326	3.11	0.009339339	76	9532.5
73	3	350	5.58	0.015807365	85	11182.5
157	0	272	3.03	0.011139706	90	11317.5
118.5	-1	318	5.34	0.016845426	89	11917.5
NA	NA	254	NA	NA	71	8752.5
149.5	-1	371	8.69	0.023486486	73	9225
132	6	350	6.39	0.017949438	82	8917.5

79.5	0	380	6.51	0.017131579	75	9067.5
59	-2	300	5	0.016778523	74	9255
102.5	6	285	4.31	0.014810997	80	9660
87	-1	301	3.55	0.011833333	70	9337.5
87	3	276	3.96	0.014193548	76	10372.5
162.5	8	353	2.5	0.006925208	85	9787.5
108.5	10	307	4.84	0.015268139	85	9285
159.5	7	326	4.68	0.014054054	72	9112.5
87	6	337	5.07	0.014781341	78	9337.5
71.5	10	310	3.13	0.00978125	77	9772.5
80	0	309	2.78	0.008996764	71	8580
85	3	305	3.11	0.010097403	78	8475
115.5	6	368	3.85	0.010294118	73	8115
125.5	14	343	3.65	0.01022409	68	7867.5
120	11	345	6.14	0.017247191	68	9172.5
123.5	-1	350	5.55	0.015902579	70	8332.5
55	-3	282	2.91	0.010430108	73	9225
68.5	-4	316	3.26	0.010448718	72	8602.5
105	5	354	4.85	0.013509749	83	9330
67	-1	294	4.14	0.014129693	71	10170
65.5	3	330	4.52	0.013573574	79	9727.5
NA	19	231	3.48	0.01392	62	7477.5
NA	42	320	5.79	0.015994475	73	8797.5
NA	40	300	9.93	0.029205882	80	10290
NA	51	360	9.03	0.021970803	83	11137.5
55	2	335	2.51	0.007448071	79	10980
NA	39	334	5.99	0.016058981	74	10102.5
NA	26	326	4.84	0.01375	78	12240
NA	20	273	3.45	0.011774744	76	10852.5
NA	21	314	5.79	0.017283582	79	10462.5
NA	24	293	3.67	0.011577287	76	9952.5
NA	53	383	9.73	0.022316514	80	10965
NA	38	332	5.44	0.014702703	80	10012.5
NA	34	279	3.61	0.011533546	79	10395
NA	26	287	5.75	0.018370607	78	9502.5
NA	17	326	5.74	0.016734694	83	9442.5
NA	35	268	3.63	0.011980198	63	7447.5
NA	37	296	3.95	0.011861862	74	10125
NA	53	276	8.05	0.024468085	89	13282.5
NA	30	307	6.01	0.017833828	90	14152.5
NA	30	296	7.38	0.022638037	89	11377.5
NA	12	273	3.57	0.012526316	69	7785
NA	24	282	3.37	0.011013072	74	8760
NA	29	310	4.31	0.012713864	62	8527.5
NA	24	272	3.32	0.011216216	61	8182.5
NA	30	275	4.18	0.013704918	79	10687.5

NA	30	293	4.19	0.012972136	78	10290
NA	46	309	4.45	0.012535211	77	8437.5
NA	22	348	3.93	0.010621622	74	9540
NA	22	309	3.89	0.011752266	72	9787.5
NA	36	272	4.38	0.014220779	79	10500
NA	26	287	6.78	0.021661342	75	10462.5
NA	47	304	5.93	0.016894587	76	8677.5
NA	26	314	5.35	0.015735294	69	9157.5
NA	28	346	3.84	0.01026738	77	8550
NA	43	365	3.37	0.008259804	66	NA
NA	29	264	4.98	0.016996587	82	10710
NA	47	363	10.28	0.025073171	80	10365
NA	18	307	4.27	0.013138462	81	10080
NA	39	388	6.73	0.015761124	66	11295
NA	67	278	4.13	0.011971014	69	7095
NA	32	350	4.48	0.011727749	87	12367.5
NA	23	285	4.3	0.013961039	76	9622.5
NA	36	343	4.07	0.010738786	74	11767.5
NA	59	321	2.72	0.007157895	80	9075
NA	48	321	7.47	0.020243902	99	11737.5
NA	51	325	3.44	0.009148936	87	10155
NA	31	345	7.33	0.019494681	75	10035
NA	21	316	5.08	0.015074184	81	9765
NA	22	378	5.6	0.014	78	10245
NA	24	362	4.98	0.012901554	74	10207.5
NA	9	270	2.22	0.007956989	69	7965
NA	23	278	3.04	0.010099668	66	8797.5
NA	46	323	11.21	0.030379404	80	9930
NA	35	306	3.71	0.010879765	83	9720
NA	28	305	4.13	0.012402402	78	10117.5
NA	16	350	5.59	0.015273224	78	8752.5
NA	86	311	6.29	0.015843829	85	11175
NA	45	302	3.65	0.010518732	73	7890
NA	41	314	3.81	0.010732394	69	7575
NA	37	307	4	0.011627907	92	10815
NA	66	255	4.65	0.014485981	80	10027.5
NA	58	415	11.51	0.024334038	89	10155
NA	43	376	8.74	0.020859189	86	9952.5
NA	36	327	5.17	0.014242424	79	10035
NA	17	291	2.54	0.008246753	68	10582.5
NA	23	340	5.36	0.01476584	75	10065
NA	31	320	6.38	0.018176638	79	9450
NA	54	355	9.74	0.023814181	84	9142.5
NA	31	359	10.91	0.027974359	75	11242.5
NA	41	373	11.72	0.028309179	82	11100
NA	61	320	8.06	0.021154856	77	11917.5

NA	37	290	3.65	0.01116208	91	15150
NA	34	287	2.61	0.008130841	63	9352.5
NA	30	283	4.11	0.01313099	81	9435
NA	31	316	6.5	0.018731988	77	10515
NA	27	318	8.01	0.023217391	81	11835
NA	11	352	4.61	0.012699725	68	8332.5
NA	33	360	7.13	0.018142494	72	9292.5
NA	21	323	5.28	0.015348837	68	8205
NA	48	300	4.08	0.011724138	66	8175
NA	45	368	11.45	0.027723971	67	9750
NA	39	321	9.63	0.02675	71	10207.5
NA	41	354	8.79	0.022253165	69	8415
NA	35	280	4.56	0.01447619	66	9127.5
NA	50	360	4.81	0.011731707	77	9757.5
NA	51	330	5.57	0.014619423	76	8190
NA	34	397	3.36	0.007795824	81	11782.5
NA	40	382	5.09	0.012061611	84	14310
NA	38	298	1.85	0.005505952	78	8610
NA	35	312	6.08	0.017521614	81	10980
NA	58	333	8.78	0.022455243	69	9450
NA	36	286	4.35	0.013509317	77	10785
NA	37	304	3.59	0.010527859	81	10822.5
NA	28	296	2.46	0.007592593	76	9585
NA	31	300	4.26	0.012870091	77	9675
NA	43	307	5.32	0.0152	82	9720
NA	42	333	4.96	0.013226667	77	8302.5
NA	32	321	3.38	0.009575071	89	9180
NA	25	323	5.22	0.015	82	9555
NA	32	295	4.22	0.012905199	83	11782.5
NA	4	261	2.54	0.009584906	88	11197.5
NA	39	290	5.25	0.015957447	73	10695
NA	42	346	6.09	0.015695876	81	9315
NA	31	304	5.34	0.015940299	100	12352.5
NA	53	397	8.38	0.018622222	90	11947.5
NA	31	382	5.7	0.013801453	80	11707.5
NA	7	323	4.28	0.012969697	88	12952.5
NA	23	275	3.16	0.010604027	76	9750
NA	44	277	7.27	0.022647975	87	11362.5
NA	23	329	8.9	0.025284091	90	12180
NA	33	297	5.59	0.016939394	92	10095
NA	49	336	6.1	0.015844156	86	12232.5
NA	11	298	3.58	0.011585761	79	8947.5
NA	21	254	2.49	0.009054545	67	9060
NA	43	320	4.49	0.012369146	71	9795
NA	26	351	6.68	0.017718833	85	9757.5
NA	49	383	9.76	0.022592593	83	10455

NA	38	329	4.42	0.012043597	88	11842.5
NA	37	391	8.26	0.019299065	88	13027.5
NA	23	374	7.15	0.018010076	86	10477.5
NA	22	285	6.15	0.020032573	78	12277.5
NA	31	385	6.64	0.015961538	87	11955
NA	25	354	5.5	0.014511873	83	12562.5
NA	41	376	4.51	0.010815348	79	11167.5
NA	21	330	5.21	0.014843305	70	8632.5
NA	37	309	1.85	0.005346821	76	8962.5
NA	60	366	6.86	0.016103286	81	8895
NA	27	306	3.75	0.011261261	80	8625
NA	35	335	6.71	0.018135135	81	9375
NA	38	326	4.14	0.011373626	94	10837.5
NA	29	368	4.75	0.011964736	86	10170
NA	17	366	5.84	0.015248042	85	10642.5
NA	38	305	4.78	0.01393586	91	11220
NA	26	366	4.87	0.012423469	86	10275
NA	18	294	3.27	0.010480769	71	10447.5
NA	26	292	3.36	0.010566038	78	11505
NA	22	324	12.37	0.035751445	84	10612.5
NA	26	335	3.13	0.00867036	76	9450
NA	12	350	6.57	0.018149171	75	10567.5
NA	15	331	4.04	0.011676301	85	11115
NA	8	313	3.44	0.010716511	78	10050
NA	32	369	3.5	0.00872818	85	11407.5
NA	27	376	4.82	0.011960298	79	10792.5
NA	40	439	9.71	0.020271399	84	9330
NA	17	431	7.8	0.017410714	82	9435
NA	14	324	3.77	0.011153846	81	9262.5
NA	18	303	3.57	0.011121495	83	9592.5
NA	21	279	2.02	0.006733333	86	9592.5
NA	14	289	6.1	0.020132013	75	10920
NA	8	271	4.07	0.014587814	85	10080
NA	35	330	6.63	0.018164384	81	11790
NA	32	376	4.56	0.011176471	87	13125
NA	22	369	7.8	0.019948849	82	9427.5
NA	17	328	4.42	0.012811594	87	12352.5
NA	31	362	9.48	0.024122137	91	12315
NA	25	293	4.15	0.013050314	82	9862.5
NA	23	273	6.34	0.021418919	77	10140
NA	13	317	5.7	0.017272727	74	10710
NA	14	296	6.42	0.020709677	72	11910
NA	29	306	6.79	0.020268657	76	9862.5
NA	18	304	5.25	0.016304348	73	9172.5
NA	22	344	5.58	0.015245902	70	10102.5
NA	39	355	7.29	0.018502538	72	8655

NA	33	354	5.45	0.014082687	76	9667.5
NA	30	335	4.83	0.013232877	75	9735
NA	19	271	3.39	0.011689655	77	7815
NA	13	282	3.17	0.010745763	76	8527.5
NA	46	368	10.52	0.025410628	84	12652.5
NA	51	360	10.49	0.025523114	81	10357.5
NA	22	289	4.41	0.014180064	84	8610
NA	25	335	5.63	0.015638889	70	9315
NA	32	350	6.8	0.017801047	74	9367.5
NA	52	411	8.72	0.018833693	83	11317.5
NA	50	320	6.98	0.018864865	90	11955
NA	27	265	7.18	0.024589041	86	12292.5
NA	-31	373	5.49	0.016052632	83	11092.5
NA	-59	328	2.27	0.008438662	78	8280
NA	51	351	4.77	0.011865672	78	10552.5
NA	38	362	4.74	0.01185	75	11662.5
NA	46	300	3.61	0.010433526	86	9427.5
NA	13	404	19.19	0.046019185	76	12037.5
NA	21	282	3.57	0.011782178	82	10095
NA	43	302	3.02	0.008753623	81	10627.5
NA	38	334	4.04	0.010860215	75	8827.5
NA	34	322	5.24	0.014719101	77	8482.5
NA	28	300	3.93	0.011981707	76	8460
NA	18	270	4.15	0.014409722	74	10822.5
NA	16	293	4.52	0.014627832	75	10410
NA	31	363	5.34	0.013553299	76	10620
NA	22	355	4.27	0.01132626	81	12090
NA	32	347	5.8	0.01530343	73	10882.5
NA	46	341	6.65	0.017183463	80	9510
NA	22	310	5.31	0.015993976	70	7215
NA	33	397	9.41	0.021883721	85	8452.5
NA	20	285	4.56	0.01495082	83	10830
NA	35	282	2.41	0.007602524	78	9180
NA	22	448	9.55	0.020319149	76	10890
NA	26	402	5.52	0.012897196	82	10380
NA	37	318	3.2	0.009014085	83	10650
NA	21	377	8.45	0.021231156	84	12210
NA	28	310	3.21	0.009497041	81	9315
NA	42	340	4.29	0.011230366	80	11010
NA	20	300	5.84	0.01825	91	10822.5
NA	14	276	3.58	0.012344828	94	11902.5
NA	31	335	5.23	0.014289617	77	11355
NA	68	435	14.49	0.028807157	78	11857.5
NA	-45	377	4.01	0.012078313	83	9390
NA	84	306	6.6	0.016923077	83	10500
NA	23	310	5.9	0.017717718	83	9742.5

NA	17	314	4.8	0.014501511	72	8992.5
NA	21	348	6.21	0.016829268	73	8925
NA	20	335	5.19	0.014619718	80	11002.5
NA	35	300	3.69	0.011014925	78	8632.5
NA	16	296	4.1	0.013141026	71	9240
NA	3	253	3.13	0.012226563	66	9247.5
NA	23	220	1.5	0.00617284	75	8355
NA	45	364	7.73	0.018899756	77	10425
NA	44	413	9.92	0.021706783	81	10350
NA	52	405	11.75	0.02571116	85	11107.5
NA	33	367	5.79	0.014475	80	8962.5
NA	43	372	8.01	0.019301205	86	9712.5
NA	41	389	5.81	0.013511628	79	10995
NA	20	331	6.49	0.018490028	78	9262.5
NA	18	300	4.31	0.013553459	87	11010
NA	29	291	4.64	0.0145	89	11887.5
NA	38	310	6.83	0.019626437	87	12585
NA	23	280	4.42	0.014587459	79	15855
NA	25	278	3.76	0.012409241	76	9345
NA	37	315	6.65	0.018892045	77	10080
NA	15	313	3.75	0.011432927	73	10470
NA	22	287	3.77	0.012200647	82	8940
NA	15	293	3.39	0.011006494	73	9967.5
NA	24	317	4.8	0.014076246	74	11152.5
NA	22	340	5.53	0.015276243	78	14190
NA	15	345	5.64	0.015666667	76	12210
NA	44	331	6.88	0.018346667	82	11107.5
NA	12	346	5.35	0.014944134	77	10470
NA	41	355	8.59	0.021691919	76	12900
NA	33	327	8.23	0.022861111	70	9022.5
NA	90	295	6.8	0.017662338	85	9697.5
NA	-32	352	4	0.0125	91	9952.5
NA	25	309	5.52	0.016526946	72	8625
NA	17	323	3.93	0.011558824	71	10942.5
NA	24	324	8.71	0.025028736	80	10237.5
NA	40	326	9.23	0.025218579	81	9607.5
NA	19	265	4.89	0.01721831	87	11685
NA	11	295	4.48	0.014640523	90	10537.5
NA	29	365	4.52	0.011472081	73	10012.5
NA	30	332	5.21	0.014392265	84	11790
NA	10	360	6.56	0.01772973	73	11827.5
NA	24	322	6.09	0.017601156	84	10080
NA	19	278	3.18	0.010707071	67	9427.5
NA	22	337	4.67	0.013008357	72	9427.5
NA	41	363	9.62	0.023811881	74	9052.5
NA	54	290	4.82	0.014011628	78	8122.5

NA	22	343	8	0.021917808	84	12367.5
NA	27	324	4.8	0.013675214	89	11122.5
NA	21	302	4.83	0.01495356	85	9660
NA	33	326	5.38	0.014986072	72	8377.5
NA	44	378	8.49	0.020118483	77	10177.5
NA	20	325	6.6	0.019130435	83	8745
NA	23	315	4.96	0.014674556	80	8692.5
NA	20	350	4.73	0.012783784	90	10275
NA	22	333	3.79	0.010676056	85	10575
NA	17	362	7.31	0.019287599	80	8760
NA	-11	381	9.45	0.025540541	81	8595
NA	34	390	5.87	0.01384434	90	10042.5
NA	46	415	6.27	0.013600868	80	11407.5
NA	23	337	4.78	0.013277778	74	9247.5
NA	32	341	4.82	0.012922252	71	9442.5
NA	7	310	4.06	0.012807571	78	13080
NA	17	283	2.21	0.007366667	79	10567.5
NA	37	320	7.27	0.020364146	84	8190
NA	31	332	5.58	0.015371901	79	8910
NA	26	255	2.61	0.009288256	80	10950
NA	12	260	3.09	0.011360294	79	11550
NA	11	346	5.52	0.015462185	75	9240
NA	30	308	4.68	0.013846154	79	9375
NA	53	311	4.7	0.012912088	86	11602.5
NA	34	304	3.7	0.010946746	83	10552.5
NA	30	345	7.46	0.019893333	79	9615
NA	47	380	11.79	0.027611241	82	10080
NA	32	275	3.24	0.010553746	75	9105
NA	26	389	7.86	0.018939759	91	14272.5
NA	26	331	5	0.014005602	83	10447.5
NA	27	387	5.56	0.013429952	83	9390
NA	22	320	3.08	0.009005848	84	10237.5
NA	37	342	4.59	0.012110818	79	10350
NA	15	297	3.23	0.010352564	83	10635
NA	32	335	4.13	0.011253406	79	9165
NA	11	290	6.28	0.020863787	99	11587.5
NA	4	247	3.33	0.013266932	86	10200
NA	18	345	4.89	0.013471074	79	10830
NA	28	332	4.34	0.012055556	73	9900
NA	11	309	5.26	0.0164375	85	9315
NA	23	336	3.61	0.01005571	76	10380
NA	23	300	2.63	0.008142415	67	10635
NA	7	269	3.01	0.010905797	70	10620
NA	42	385	8.09	0.018946136	82	12480
NA	50	375	9.77	0.022988235	75	11220
NA	39	337	5.6	0.014893617	90	9615

NA	51	334	8.96	0.023272727	77	8857.5
NA	42	355	8.34	0.021007557	76	8662.5
NA	37	299	4.53	0.013482143	81	9412.5
NA	26	302	3.25	0.009908537	78	10042.5
NA	18	340	4.83	0.01349162	88	10777.5
NA	30	338	4.71	0.012798913	85	10020
NA	18	352	4.65	0.012567568	73	9952.5
NA	22	323	8.83	0.025594203	90	10650
NA	35	318	10.56	0.029915014	81	11985
NA	27	279	3.45	0.01127451	80	10410
NA	36	338	6.52	0.017433155	80	9120
NA	31	324	8.31	0.023408451	98	12300
NA	23	313	9.95	0.029613095	91	14467.5
NA	24	319	4.62	0.013469388	86	9637.5
NA	25	323	2.49	0.007155172	88	11190
NA	47	371	4.92	0.011770335	91	12022.5
NA	18	320	4.78	0.014142012	70	8812.5
NA	31	345	5.57	0.01481383	73	8737.5
NA	20	354	8.15	0.021791444	87	11902.5
NA	21	300	4.07	0.012679128	88	9300
NA	23	320	5.51	0.01606414	78	10380
NA	20	306	5.18	0.015889571	80	9375
NA	25	327	6.14	0.017443182	83	11272.5
NA	20	297	5.45	0.017192429	84	10612.5
NA	27	338	9.68	0.026520548	92	11220
NA	23	287	5.26	0.016967742	94	10695
NA	61	410	7.19	0.015265393	78	9270
NA	35	392	7.27	0.017025761	85	10155
NA	28	287	4	0.012698413	80	9210
NA	18	300	4.64	0.014591195	80	10462.5
NA	11	262	3.64	0.013333333	89	10312.5
NA	19	304	4.6	0.014241486	76	9795
NA	4	398	5.06	0.012587065	82	10260
NA	13	363	3.2	0.008510638	82	10920
NA	34	343	5.06	0.013421751	75	10567.5
NA	31	357	5.29	0.013634021	80	10837.5
NA	28	406	8.66	0.019953917	83	10882.5
NA	51	358	19.13	0.046772616	75	10267.5
NA	27	254	3.65	0.012989324	79	9360
NA	18	275	3.16	0.010784983	85	10035
NA	42	334	9.72	0.025851064	84	11085
NA	61	329	8.25	0.021153846	75	10492.5
NA	46	320	3.99	0.010901639	68	10440
NA	18	298	3.77	0.01193038	69	8655
NA	10	383	6.35	0.016157761	85	9000
NA	25	349	6.48	0.017326203	83	11422.5

NA	32	317	6.35	0.018194842	73	9517.5
NA	28	326	3.06	0.008644068	83	10200
NA	23	328	4.36	0.012421652	85	9720
NA	25	402	11.71	0.027423888	89	10702.5
NA	24	360	6.82	0.017760417	84	12022.5
NA	25	315	3.07	0.009029412	89	11385
NA	30	340	6.59	0.017810811	78	8700
NA	31	315	5.36	0.015491329	69	8535
NA	24	280	3.77	0.012401316	72	8145
NA	24	224	2.38	0.009596774	77	8917.5
NA	33	307	5.34	0.015705882	81	9765
NA	37	269	4.12	0.013464052	81	11640
NA	34	308	5.13	0.015	77	10935
NA	39	290	5.34	0.016231003	85	10995
NA	21	333	7.47	0.021101695	80	10620
NA	51	300	8.12	0.023133903	85	10732.5
NA	53	437	12.08	0.024653061	96	15082.5
NA	45	373	6.44	0.015406699	76	11670
NA	20	315	5.7	0.017014925	90	10642.5
NA	15	265	3.96	0.014142857	78	9660
NA	27	273	4.5	0.015	90	10335
NA	39	298	4.3	0.012759644	73	9210
NA	31	250	2.73	0.009715302	79	9780
NA	44	351	5.88	0.014886076	81	12690
NA	29	317	5.5	0.015895954	88	11842.5
NA	19	285	5.46	0.017960526	79	10282.5
NA	26	314	5.47	0.016088235	78	8917.5
NA	28	377	7.43	0.018345679	83	10395
NA	31	337	6.6	0.017934783	81	9337.5
87	-1	343	3.92	0.011461988	80	9990
66	2	310	2.71	0.008685897	73	10372.5
188.5	-8	393	5.67	0.014727273	78	9262.5
131.5	2	397	6.1	0.015288221	76	8895
58.5	8	320	3.85	0.011737805	80	9577.5
86	2	331	3.64	0.010930931	80	11280
93	-2	317	3.27	0.010380952	77	9795
84	7	313	4.57	0.01428125	76	11257.5
125	4	300	4.14	0.013618421	81	11632.5
69	0	254	3.14	0.012362205	83	10605
42	3	247	2.61	0.01044	100	12090
52	-2	334	4.22	0.012710843	68	9495
62	4	355	4.77	0.013286908	77	10395
33	-2	278	3.39	0.012282609	71	9547.5
53.5	5	316	4.46	0.013894081	76	9885
75	-1	321	4.07	0.01271875	73	8182.5
81	2	296	3.43	0.011510067	78	8205

137.5	-7	303	3.4	0.011486486	90	9045
129	-7	380	5.2	0.013941019	86	10035
200	3	293	3.89	0.013141892	80	11002.5
86	-5	329	5.09	0.015709877	86	10927.5
84	-3	373	5.69	0.015378378	82	10905
51	15	365	5.76	0.015157895	75	12510
195.5	2	394	19.14	0.048333333	85	10927.5
123.5	10	296	3.55	0.011601307	90	12727.5
116	8	320	4.94	0.015060976	80	14790
63.5	14	365	4.04	0.010659631	82	11040
112	14	371	8.59	0.022311688	83	9135
67.5	7	323	5.73	0.017363636	80	8670
101.5	4	363	5.87	0.01599455	78	9390
102	-1	361	6.2	0.017222222	76	9375
143.5	8	302	3.22	0.010387097	88	9682.5
78.5	7	273	2.27	0.008107143	91	10365
89	-3	297	2.71	0.009217687	96	12300
99.5	5	288	3.01	0.010273038	83	12427.5
72	1	292	4.99	0.017030717	83	10357.5
119.5	4	325	5.69	0.017294833	77	8595
55	5	289	3.96	0.013469388	94	10027.5
46	4	371	4.07	0.010853333	92	9660
146.5	9	338	5.69	0.016397695	94	13162.5
139	-3	259	4.51	0.017617188	75	9690
65.5	9	298	2.94	0.009576547	82	8437.5
138	5	355	6.19	0.017194444	79	12307.5
101	13	321	3.36	0.01005988	84	11340
73	5	300	2.34	0.007672131	72	8722.5
146	13	338	5.25	0.014957265	80	11167.5
38	11	344	3.65	0.01028169	80	10545
46	5	345	3.89	0.011114286	76	9405
50.5	4	344	4.27	0.012270115	75	9667.5
99.5	6	345	5.45	0.015527066	78	9795
56	13	287	3.65	0.012166667	92	10080
80.5	3	354	5.44	0.015238095	94	11497.5
40	9	340	3.77	0.010802292	80	9135
125.5	3	281	3.52	0.012394366	78	10230
78	0	290	3.07	0.010586207	75	8535
182.5	1	313	5.25	0.016719745	83	10230
144.5	3	385	7.44	0.019175258	89	10125
84	0	329	3.08	0.009361702	80	9960
76	4	296	4.07	0.013566667	87	10897.5
80.5	8	299	5.49	0.017882736	72	7837.5
119	8	290	4.23	0.014194631	72	12532.5
43	1	350	3.2	0.009116809	75	11115
86	-3	343	4.2	0.012352941	71	11077.5

188.5	6	301	4.66	0.015179153	69	9945
230.5	3	387	7.8	0.02	83	10725
89.5	12	278	4.57	0.015758621	84	11085
289.5	10	350	6.81	0.018916667	89	12690
178.5	6	413	6.45	0.015393795	80	10462.5
81	-2	387	4.35	0.011298701	85	9922.5
110	22	320	3.68	0.010760234	75	9397.5
117	6	314	4.17	0.01303125	76	9697.5
63	6	337	2.91	0.008483965	80	11692.5
50.5	-1	345	3.91	0.011366279	69	11295
82.5	2	349	4.43	0.012621083	77	10507.5
87	-3	332	4.13	0.012553191	83	10072.5
57	1	286	3.74	0.013031359	78	10260
74	3	217	2.64	0.012	78	9532.5
220.5	13	397	7.23	0.017634146	73	8895
93.5	11	380	6.14	0.015703325	72	8722.5
92	2	312	4.09	0.013025478	77	9420
91	5	315	4.65	0.01453125	80	9990
87	8	307	4.18	0.013269841	81	10927.5
82.5	11	343	4.59	0.012966102	78	10342.5
134	5	290	2.18	0.007389831	81	9885
56	-3	328	2.44	0.007507692	85	9922.5
78.5	5	346	6.94	0.01977208	78	11160
67.5	7	353	4.67	0.012972222	72	9690
118.5	2	345	6	0.017291066	84	8797.5
77	7	309	3.59	0.011360759	79	10447.5
66.5	2	357	4.54	0.01264624	77	9315
74	5	352	4.61	0.012913165	78	10230
123	5	307	3.27	0.010480769	95	12885
130.5	-4	357	3.97	0.011246459	88	11212.5
65	8	316	3.47	0.010709877	81	8685
100	9	337	6.1	0.017630058	83	9022.5
69	5	320	3.71	0.011415385	91	13260
75	1	324	4.03	0.0124	87	10447.5
90.5	11	329	2.66	0.007823529	79	10755
119.5	5	341	4.8	0.013872832	85	8272.5
46.5	12	297	3.69	0.011941748	85	9615
52.5	9	331	4.55	0.013382353	80	10702.5
179	3	362	4.85	0.013287671	80	10020
87	8	335	5.41	0.015772595	85	9997.5
159	6	340	10.65	0.030780347	72	9772.5
139.5	10	287	6.33	0.021313131	81	11137.5
95.5	13	396	4.22	0.010317848	83	10350
67	11	374	5.84	0.015168831	85	8490
69	-1	350	5.58	0.015988539	83	9540
89	8	332	4.79	0.014088235	80	8715

44	8	329	3.81	0.011305638	87	10717.5
122	4	338	5.03	0.014707602	85	10440
101	6	387	4.76	0.012111959	79	11857.5
159	8	355	5.74	0.015812672	89	10215
118	9	357	4.79	0.013087432	74	9735
172.5	-3	373	4.74	0.012810811	89	9682.5
92	3	346	8.32	0.023839542	88	11167.5
160	-5	340	5.31	0.015850746	90	10777.5
99	3	270	4.38	0.016043956	73	7717.5
69	6	300	4.74	0.015490196	78	9172.5
95.5	9	254	2.77	0.010532319	76	10350
205	5	209	2.02	0.009439252	74	10110
101.5	5	275	4.04	0.014428571	80	10125
306.5	12	320	4.81	0.014487952	84	12052.5
160	4	296	3.75	0.0125	89	12015
81.5	16	334	4.57	0.013057143	78	9435
76.5	7	397	5.26	0.013019802	80	9157.5
90	2	338	3.25	0.009558824	81	11100
61	0	330	4.16	0.012606061	77	10027.5
108.5	8	359	7.28	0.019836512	83	11535
63.5	2	320	3.53	0.010962733	78	8895
56.5	17	387	5.04	0.012475248	78	10177.5
42.5	-1	306	2.7	0.008852459	76	10342.5
38.5	16	318	3.25	0.009730539	71	8025
49	11	248	3.15	0.012162162	68	8857.5
75	-1	315	4.65	0.014808917	70	9180
54.5	8	329	3.63	0.010771513	69	8857.5
40.5	8	289	3.45	0.011616162	78	10627.5
53.5	9	306	3.81	0.012095238	75	12502.5
103.5	2	297	3.39	0.011337793	86	11182.5
70	2	314	3.32	0.010506329	88	11017.5
117.5	5	313	4.95	0.015566038	85	9322.5
100	4	295	3.51	0.01173913	84	8167.5
60	10	360	4.25	0.011486486	77	12555
103	-1	375	4.36	0.011657754	87	11407.5
74.5	9	365	4.46	0.011925134	87	12375
107	7	279	4.39	0.01534965	88	12060
86.5	-7	327	6.46	0.0201875	87	11985
95	3	281	6	0.021126761	87	10087.5
86	2	301	6.62	0.021848185	85	11572.5
108	8	284	4.18	0.014315068	92	11482.5
47.5	5	324	4.29	0.013039514	85	11377.5
87.5	-2	333	4.26	0.012870091	86	10462.5
100.5	9	309	4.56	0.014339623	82	12427.5
116	7	349	5.96	0.016741573	94	10507.5
54	7	286	2.49	0.008498294	81	10852.5

54	10	369	4.29	0.011319261	82	12457.5
61	10	311	5.17	0.016105919	89	12262.5
151	6	267	4.54	0.016630037	85	11842.5
82.5	-3	357	3.6	0.010169492	75	9577.5
136	6	334	3.97	0.011676471	75	7942.5
158.5	-1	281	4.49	0.016035714	82	9877.5
141	10	293	5.15	0.0169967	87	10980
75.5	-11	290	3.05	0.0109319	86	9675
84.5	16	332	3.93	0.011293103	86	11310
102.5	13	374	4.96	0.012816537	89	10590
127.5	12	288	3.93	0.0131	82	9045
49	8	295	2.78	0.009174917	75	9855
56	4	253	3.09	0.012023346	80	10207.5
77.5	6	396	4.81	0.011965174	81	10380
58.5	1	320	4.09	0.012741433	84	9810
85.5	5	312	4.71	0.014858044	78	10372.5
73.5	5	323	4.55	0.013871951	90	10680
89.5	7	398	4.69	0.011580247	78	9817.5
72.5	4	357	6.65	0.018421053	79	8850
64	5	344	6.81	0.019512894	77	10672.5
68.5	5	350	6.87	0.019352113	80	10762.5
90	6	345	5.06	0.014415954	80	9742.5
66.5	12	351	4.13	0.01137741	82	9832.5
117.5	7	300	4.18	0.013615635	89	8347.5
172	18	335	4.5	0.012747875	91	9570
86.5	-8	292	3.32	0.011690141	74	9637.5
107	6	300	3.88	0.012679739	84	10425
251.5	6	373	4.55	0.012005277	83	11752.5
54	20	382	5.14	0.01278607	79	12832.5
62	6	350	4.29	0.012050562	77	10627.5
134.5	18	381	7.21	0.018070175	80	11040
84	8	405	6.26	0.015157385	88	10552.5
89.5	4	351	5.95	0.016760563	83	9690
96	1	337	6.37	0.018846154	83	9825
166	8	367	4.81	0.012826667	83	9517.5
92.5	6	337	4.3	0.012536443	79	8730
93.5	8	347	5.67	0.015971831	87	9877.5
117	2	372	4.59	0.012272727	81	11280
208.5	19	375	8.58	0.02177665	92	9375
83.5	19	359	3.69	0.009761905	84	9900
67.5	10	336	4.24	0.012254335	83	12112.5
98	10	287	3.91	0.013164983	72	11812.5
90.5	3	365	3.85	0.010461957	79	9420
57	7	320	2.85	0.008715596	82	9787.5
73.5	1	305	3.09	0.010098039	78	9577.5
130	3	275	3.61	0.012985612	83	10342.5

109.5	9	280	3.52	0.012179931	88	10065
107.5	5	318	3.1	0.009597523	82	11737.5
215	1	370	19.18	0.051698113	87	10215
133.5	2	345	4.58	0.013198847	85	10252.5
105.5	-2	353	7.09	0.02019943	75	10530
107.5	13	378	8.53	0.021815857	81	10807.5
58	2	284	4.64	0.016223776	86	11737.5
208.5	0	290	3.67	0.012655172	82	9667.5
121	3	317	5.11	0.01596875	88	12217.5
165	1	344	5.59	0.016202899	88	11722.5
98	-11	363	6.9	0.019602273	76	8625
96	-7	348	6.65	0.019501466	76	9090
95.5	3	307	2.76	0.008903226	81	10957.5
72	5	280	2.96	0.010385965	71	11235
92.5	-1	223	1.91	0.008603604	74	8475
151.5	3	302	3.82	0.01252459	77	11077.5
79	0	401	5.35	0.013341646	82	10620
134.5	10	380	5.76	0.014769231	92	10395
125.5	3	377	5.39	0.014184211	84	12277.5
118	13	309	4.05	0.01257764	78	9562.5
101	2	369	4.37	0.011778976	89	10987.5
89	15	317	4.47	0.013463855	79	10545
95	9	346	4.55	0.012816901	81	9885
84	11	385	3.6	0.009090909	71	9832.5
51.5	-1	342	4.1	0.01202346	83	10740
117.5	6	384	7.05	0.018076923	85	11377.5
155	3	321	4.79	0.014783951	87	11325
186.5	2	307	3.81	0.012330097	78	10665
61	0	329	3.41	0.010364742	84	10440
90.5	5	343	4.22	0.012126437	70	9592.5
101.5	8	351	5.44	0.015153203	87	9540
55.5	3	318	3.95	0.012305296	83	10942.5
52	2	317	3.86	0.012100313	82	9382.5
67.5	4	320	3.7	0.011419753	83	12127.5
439.5	3	430	8.22	0.018983834	87	10425
119	6	354	5.31	0.01475	76	7777.5
94.5	9	264	2.11	0.007728938	76	10485
132	5	254	3.32	0.012818533	84	10410
90.5	9	253	2.54	0.009694656	73	9712.5
111	17	344	4.93	0.01365651	79	9187.5
92	10	300	2.72	0.008774194	85	11422.5
84.5	6	334	3.3	0.009705882	79	9915
76.5	2	358	3.91	0.010861111	87	10065
66	-2	309	1.96	0.006384365	86	9060
136	0	284	3.63	0.01278169	80	8970
60	-4	289	3.62	0.012701754	73	10672.5

60	-4	291	3.38	0.011777003	93	10035
78.5	-12	266	2.97	0.011692913	87	8977.5
138	-2	309	4.35	0.014169381	79	11115
93	6	273	4.29	0.015376344	88	10312.5
87.5	4	280	3.73	0.013133803	83	13680
134	2	260	3.44	0.013129771	86	11055
90.5	17	373	4.89	0.012538462	77	10282.5
123.5	13	402	6.91	0.016650602	84	10267.5
191	16	340	3.93	0.011039326	83	13125
115.5	9	362	4.41	0.011886792	88	9817.5
109.5	3	334	3.35	0.009940653	82	12555
133.5	2	378	3.45	0.009078947	86	11565
74	1	342	4.11	0.011982507	88	11497.5
171	10	398	7.21	0.017671569	92	12892.5
220	0	370	8.15	0.022027027	82	12817.5
194.5	-8	329	8.35	0.026012461	83	9742.5
67.5	12	312	2.76	0.008518519	76	10447.5
100.5	14	404	7.08	0.016937799	88	9585
156	5	307	4.39	0.014070513	87	11812.5
93.5	12	325	4.52	0.013412463	80	11932.5
101.5	1	333	5.78	0.017305389	80	10297.5
96.5	-3	348	5.12	0.01484058	80	10335
76	8	307	4.77	0.015142857	86	9120
62.5	5	354	5.27	0.014679666	66	9037.5
66	-1	293	3.17	0.010856164	78	10417.5
75.5	10	282	3.07	0.010513699	80	12982.5
152	8	363	5.72	0.01541779	85	12795
71	8	359	3.69	0.010054496	80	11572.5
64	4	337	4.78	0.014017595	76	9277.5
58.5	17	306	3.92	0.012136223	73	10897.5
70	11	320	3.96	0.011963746	81	9487.5
69	7	357	3.9	0.010714286	78	9765
161	19	353	8.03	0.021586022	91	11542.5
116	11	349	5.87	0.016305556	89	10447.5
75.5	4	339	5.22	0.015218659	74	10597.5
115.5	0	310	5.28	0.017032258	76	10830
122	0	369	4.58	0.012411924	82	11490
133	14	390	5.04	0.012475248	93	11865
158.5	-11	404	5.83	0.014834606	82	9240
125	3	301	4.22	0.013881579	71	11265
118.5	0	272	4.15	0.015257353	78	11647.5
119.5	2	280	4.72	0.016737589	81	11580
212	3	346	6.59	0.018882521	82	11302.5
111	5	347	3.71	0.010539773	85	11407.5
69.5	-1	323	3.64	0.011304348	88	11070
98	6	296	3.03	0.010033113	82	11842.5

60	1	333	4.23	0.012664671	80 NA
228	8	433	12.34	0.027981859	87 NA
135.5	4	374	5.9	0.015608466	99 NA
81.5	8	365	5.34	0.014316354	88 NA

Heart/BW	InsO	InsAUC	LftKid/BW	WPIC	Pancreas/BW
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	0.147	65	NA	NA	NA
NA	0.329	NA	NA	NA	NA
NA	0.196	93	NA	NA	NA
NA	0.114	122	NA	NA	NA
NA	0.93	332	NA	NA	NA
NA	1	391	NA	NA	NA
NA	0.659	210	NA	NA	NA
NA	0.201	NA	NA	NA	NA
NA	0.499	148	NA	NA	NA
NA	0.358	127	NA	NA	NA
NA	0.391	67	NA	NA	NA
NA	0.442	166	NA	NA	NA
NA	0.298	163.14	NA	NA	NA
NA	1	186	NA	NA	0.001859838
NA	0.403	147	NA	NA	0.001941176
NA	0.766	155	NA	NA	0.00221519
NA	1	NA	NA	NA	0.001754967
NA	0.557	131	NA	NA	0.002138158
NA	0.66	153	NA	NA	0.002361963
NA	0.844	223	NA	NA	0.002065574
NA	0.465	169	NA	NA	0.002013889
NA	1	190	NA	NA	0.002473868
NA	0.403	147	NA	NA	0.001787879
NA	0.939	NA	NA	NA	0.002222222
NA	1	217	NA	NA	0.00203125
NA	0.662	NA	NA	NA	0.002301587
NA	1	167.73	NA	NA	0.002483221
NA	0.815	174	NA	NA	0.001861111
NA	1	208	NA	NA	0.002225201
NA	0.85	264.42	NA	NA	0.002103825
NA	0.744	201	NA	NA	0.002298851
NA	0.83	212	NA	NA	0.001752266
NA	0.597	NA	NA	NA	0.00248503
NA	1	289.05	NA	NA	0.002177215
NA	0.639	156	NA	NA	0.001989529
NA	0.896	NA	NA	NA	0.00205
NA	0.776	200	NA	NA	0.002169312
NA	2	394	NA	NA	0.002086514
NA	1	238	NA	NA	0.00150134
NA	0.425	143	NA	NA	0.001661972
NA	0.416	NA	NA	NA	0.001981707

NA	0.539	150	NA	NA	0.001735537
NA	0.509	NA	NA	NA	0.00173913
NA	0.564	245	NA	NA	0.001666667
NA	0.35	127.62	NA	NA	0.001957672
NA	2	329	NA	NA	0.00129717
NA	0.802	183	NA	NA	0.001887324
NA	2	310.83	NA	NA	0.001818182
NA	1	249	NA	NA	0.002108626
NA	1	257	NA	NA	0.001754875
NA	0.854	236.61	NA	NA	0.001926346
NA	1.26	259	NA	NA	0.001394737
NA	0.67	202	NA	NA	0.001657754
NA	1	174	NA	NA	0.001633803
NA	0.98	198	NA	NA	0.00189415
NA	0.799	247	NA	NA	0.001903485
NA	0.686	149	NA	NA	0.001641337
NA	0.443	133	NA	NA	0.001791908
NA	1	204	NA	NA	0.001808511
NA	1	274	NA	NA	0.001774194
NA	1	369	NA	NA	0.001270983
NA	0.965	153	NA	NA	0.002171053
NA	1	260.94	NA	NA	0.001966667
NA	0.97	197	NA	NA	0.001973684
NA	1	NA	NA	NA	0.001693548
NA	1	336	NA	NA	0.00192
NA	1	260	NA	NA	0.001806452
NA	1	373	NA	NA	0.001912226
NA	0.922	140	NA	NA	0.001505682
NA	1	259	NA	NA	0.001587302
NA	1.01	312	NA	NA	0.001911263
NA	1	326.67	NA	NA	0.001694915
NA	1	184.08	NA	NA	0.001850746
NA	0.651	249	NA	NA	0.001433447
NA	0.736	220	NA	NA	0.002033898
NA	1	330	NA	NA	0.001820728
NA	3	270.54	NA	NA	0.001661808
NA	2	NA	NA	NA	0.001653117
NA	0.966	186	NA	NA	0.001987179
NA	1	237	NA	NA	0.002045455
NA	2.03	283.59	NA	NA	0.001509434
NA	1	279	NA	NA	0.001632653
NA	1	167	NA	NA	0.00199422
NA	0.708	144	NA	NA	0.002246154
NA	1	262	NA	NA	0.002255892
NA	1	301	NA	NA	0.001359773
NA	2	332	NA	NA	0.002175325

NA	2	301	NA	NA	0.001821192
NA	1	181	NA	NA	0.002114094
NA	0.843	168	NA	NA	0.001993355
NA	0.757	253	NA	NA	0.001679587
NA	2	279	NA	NA	0.001943662
NA	0.446	179.64	NA	NA	0.002507205
NA	0.467	143	NA	NA	0.002011173
NA	2	288	NA	NA	0.001432432
NA	1	270	NA	NA	0.002118644
NA	0.814	196	NA	NA	0.001564626
NA	3	283.98	NA	NA	0.001179039
NA	1	237	NA	NA	0.001542169
NA	1	177	NA	NA	0.001508951
NA	0.738	199	NA	NA	0.001656805
NA	0.441	178	NA	NA	0.001856287
NA	1	182.19	NA	NA	0.001893491
NA	0.964	208	NA	NA	0.001775457
NA	2	390.63	NA	NA	0.001522843
NA	1	200	NA	NA	0.002050473
NA	0.997	204	NA	NA	0.001595092
NA	1.23	157.86	NA	NA	0.001589404
NA	1	140	NA	NA	0.001643192
NA	1	189	NA	NA	0.002172619
NA	2	345	NA	NA	0.002140762
NA	0.597	114	NA	NA	0.002155477
NA	0.832	153	NA	NA	0.001993569
NA	1	235	NA	NA	0.001971014
NA	2	448	NA	NA	0.001684211
NA	0.902	346	NA	NA	0.001713615
NA	1	252.27	NA	NA	0.001911263
NA	0.918	243.78	NA	NA	0.001716172
NA	0.439	113	NA	NA	0.002086957
NA	0.809	161	NA	NA	0.002138365
NA	1	237	NA	NA	0.001640867
NA	0.886	194	NA	NA	0.00173913
NA	0.654	167.82	NA	NA	0.002457627
NA	1	207	NA	NA	0.002154696
NA	1	164	NA	NA	0.001710214
NA	0.64	121.02	NA	NA	0.0022
NA	0.552	140	NA	NA	0.001895604
NA	0.956	165	NA	NA	0.001757925
NA	0.403	116	NA	NA	0.001918919
NA	0.829	113	NA	NA	0.002056962
NA	0.742	228	NA	NA	0.001480583
NA	0.883	168	NA	NA	0.001822542
NA	1	NA	NA	NA	0.001569767

NA	1	198	NA	NA	0.001428571
NA	1	275	NA	NA	0.001818182
NA	1.17	197	NA	NA	0.001832797
NA	2	205	NA	NA	0.001561644
NA	1	331	NA	169389	0.002391931
NA	0.554	68.7	NA	110274	0.002906977
NA	3	753	NA	149882	0.00201373
NA	1	302	NA	223731	0.001656051
NA	0.86	123.9	NA	106816	0.003280255
NA	1	342.66	NA	169405	0.002431078
NA	1	317.19	NA	91259	0.003538462
NA	1	337	NA	105774	0.002401055
NA	1	294	NA	143493	0.002361809
NA	1	315.9	NA	131532	0.002633229
0.002714286	2	450	NA	83872	0.003571429
0.002755418	0.688	236.43	NA	132238	0.003126935
0.002581602	1	573.9	NA	182218	0.003264095
0.002789969	0.996	314	NA	280376	0.002664577
0.00300885	1	255	NA	111810	0.003097345
0.002875	0.707	123	NA	144968	0.0019375
0.003067227	1	154	NA	138154	0.003277311
0.003191489	2	NA	NA	202987	0.002659574
0.002869565	2	147	NA	203550	0.002318841
0.002974504	2	259	NA	162897	0.003286119
0.003159609	0.966	139.92	NA	152388	0.003355049
0.00267101	1	204.99	NA	122819	0.003420195
0.002911392	0.943	101	NA	133398	0.002626582
0.002647059	1	105	NA	79008	0.003794118
0.003009404	2	259.59	NA	141852	0.00338558
0.002903226	1	299	NA	92968	0.003064516
0.00280597	2	329	NA	107276	0.003462687
0.002712329	1	170	NA	102567	0.003287671
0.0026	0.627	144.3	NA	103359	0.003742857
0.002684932	0.392	188	NA	224813	0.001753425
0.003103448	2	308	NA	92513	0.003362069
0.002935065	0.99	207	NA	174806	0.003480519
0.003053691	1	193	NA	78393	0.003758389
0.002739726	0.912	163	NA	124066	0.003315068
0.00309375	0.757	189	NA	106049	0.00384375
0.002983051	0.663	273	NA	146811	0.003762712
0.002847222	0.567	114.48	NA	134057	0.003645833
0.002724458	1	307	NA	197320	0.003095975
0.002741935	1.98	715	NA	132162	0.002387097
0.002700297	1	292	NA	110286	0.002700297
0.002699229	0.789	231.45	NA	53099	0.003367609
0.002580645	2	256.38	NA	96982	0.002729529

0.002929782	3.23	484.41	NA	71856	0.003365617
0.002807018	3	693.3	NA	125171	0.002055138
0.002810945	2	276.24	NA	79135	0.002761194
0.002716049	2	340	NA	77763	0.003753086
NA	1	251.49	NA	105470	0.003859155
NA	1	243	NA	124132	0.002388889
NA	0.475	46	NA	114882	0.0029683
NA	0.936	233	NA	152490	0.002923077
NA	1	416	NA	169187	0.002879177
0.002574257	2.09	409.83	NA	183021	0.002326733
NA	2	392.52	NA	206173	0.0025
NA	3	496	NA	109879	0.002337349
NA	3	547	NA	129163	0.002608696
NA	1	185.37	NA	150149	0.00252809
NA	2	316	NA	167315	0.002722063
NA	3	434	NA	84690	0.002892157
NA	1	147	NA	170038	0.003081395
NA	1	320	NA	78015	0.003692722
0.003118971	2	193.47	NA	121333	0.002700965
0.003475177	1	102	NA	131289	0.003191489
NA	2	353.58	NA	87308	0.003685714
0.002891156	1	139	NA	128800	0.003401361
0.002857143	1.81	316	NA	99061	0.0028
0.002567237	1	287	NA	78971	0.002567237
0.00298103	2	267	NA	119008	0.003279133
0.004094488	1.48	157	NA	79695	0.002755906
0.003322259	2	257	NA	86222	0.002990033
0.002682927	2	334	NA	151020	0.002390244
0.002809917	1	213.93	NA	67222	0.002975207
0.002824859	2	267	NA	189939	0.00279661
0.002801047	1.2	299	NA	139362	0.002460733
0.002876712	1.29	194.97	NA	128000	0.003479452
0.002360097	2	320	NA	118333	0.002919708
0.002694611	3	417	NA	77699	0.004371257
0.00264624	1	383	NA	151018	0.003175487
0.004317549	1	397	NA	237347	0.002729805
0.002607656	5	401.91	NA	142716	0.002607656
0.002724868	4	563	NA	104820	0.003227513
0.002889518	1	240	NA	159026	0.00325779
0.002892562	0.558	220	NA	121056	0.003443526
0.002795699	0.417	121	NA	230488	0.002204301
0.003162651	0.825	165	NA	145591	0.002801205
0.003103448	3	626.61	NA	198710	0.002466844
0.003529412	2	381	NA	272308	0.002913165
0.002740113	0.663	204	NA	157271	0.003022599
0.002972222	0.497	208	NA	135651	0.0035

0.003195876	0.412	63 NA	95733	0.003608247
0.002948328	0.513	88 NA	255048	0.002553191
0.002926136	0.97 NA	NA	106667	0.004261364
0.003232628	2	339 NA	158919	0.003353474
0.00286445	2	271 NA	139214	0.00286445
0.003064067	1.21	288 NA	108533	0.004178273
0.002947658	1	325 NA	141158	0.003140496
0.003459596	2	400 NA	153649	0.002878788
0.003088235	2	357 NA	132566	0.003323529
0.003032258	2	312 NA	118816	0.004032258
0.002430939	1	657 NA	132406	0.003812155
0.003086817	2	215 NA	99467	0.004823151
0.002789318	1	346 NA	134389	0.002136499
0.002492918	2	129.72 NA	84934	0.00388102
0.002710526	1	485 NA	114056	0.002815789
0.002480818	2	309.54 NA	90551	0.003529412
0.002478873	1.62	287.67 NA	79524	0.003549296
0.002244224	0.823	207 NA	78627	0.003366337
0.003161094	2	279 NA	93978	0.002705167
0.0025	2	318 NA	119231	0.003095238
0.002895522	2	339.27 NA	115870	0.002746269
0.002888199	1.81	340 NA	170526	0.002950311
0.003243243	1	333.9 NA	162061	0.002972973
0.003026706	1	219 NA	128513	0.00347181
0.003583618	1	190.26 NA	60904	0.003924915
0.003161512	1	215 NA	57269	0.003573883
0.003636364	0.871	166.71 NA	75911	0.003272727
0.00259375	2	798 NA	99241	0.003625
0.002893773	1	412 NA	138684	0.002783883
0.003267045	3	425.67 NA	84301	0.003778409
0.004148148	2	329 NA	75923	0.002567901
0.002865672	3	486 NA	89020	0.002925373
0.002735294	1	244 NA	51120	0.004411765
0.002983425	3.59	386 NA	122871	0.003425414
0.00314578	3	396.93 NA	88148	0.002762148
0.003220339	0.97	193 NA	94489	0.003050847
0.003986014	1	193.83 NA	135747	0.002762238
0.003146067	2.05	282 NA	74060	0.005235955
0.002956522	1	205 NA	133223	0.003507246
0.003	3	370.62 NA	126667	0.002341463
0.002688172	3	919 NA	190528	0.00227957
0.002876254	1	227 NA	87579	0.003812709
0.002776204	2	343 NA	155596	0.003087819
0.002697947	0.954	153 NA	75474	0.003343109
0.002620321	3	591.12 NA	151882	0.002727273
0.003258786	2	231.3 NA	44423	0.003322684

0.003198653	0.642	107 NA	96364	0.002222222
0.002795031	0.412	123 NA	77425	0.004534161
0.003137255	1	178.38 NA	102484	0.004052288
0.003789809	1	246 NA	117966	0.003757962
0.003463542	2	409 NA	182275	0.00265625
0.002962963	0.836	145 NA	94817	0.003276353
0.003226744	1.81	293 NA	117186	0.003430233
0.003195266	2	250 NA	108326	0.003994083
0.002860577	2	339 NA	188126	0.003052885
0.003231293	0.959	140.91 NA	167213	0.00207483
0.003496732	2	311 NA	129698	0.003464052
0.003154362	1	231.18 NA	139878	0.003288591
0.002657807	0.241 NA	NA	131958	0.003189369
0.002931596	0.689	372 NA	102392	0.003159609
0.002769231	1.8	261 NA	183171	0.002523077
0.002702703	1	196.86 NA	142725	0.002732733
0.00383871	0.936	245 NA	129010	0.003322581
0.004290221	0.335	159 NA	186555	0.003753943
0.002789318	4	475.38 NA	154947	0.002255193
0.003167702	1	345 NA	97018	0.003540373
0.002699387	1.45	251 NA	83393	0.003435583
0.002810945	2	419 NA	149308	0.002661692
0.003188406	1	195 NA	68972	0.003101449
0.00275766	1	159 NA	81143	0.003119777
0.003071895	1	311 NA	124400	0.003267974
0.003208955	0.801	149 NA	210575	0.002723881
0.003539326	1.04	306.51 NA	147127	0.003089888
0.003333333	0.84	216 NA	179284	0.002753623
0.002875	1	360 NA	103726	0.00228125
0.003074534	0.698	167 NA	59573	0.003198758
0.004006515	0.465	127 NA	119457	0.002638436
0.002857143	1	300.93 NA	72317	0.003103448
0.002612137	0.721	316 NA	82781	0.003377309
0.002877493	2	93 NA	96962	0.002962963
0.003023256	2	314 NA	100067	0.003488372
0.003333333	1	174 NA	99922	0.003300971
0.003655914	0.983	205 NA	68923	0.003494624
0.003119777	0.781	252 NA	59556	0.003509749
0.003021148	2	207 NA	92679	0.003383686
0.003028391	0.51	171 NA	120125	0.003028391
0.003217391	0.716	149 NA	84770	0.003913043
0.003083333	0.212 NA	NA	106681	0.002527778
0.003050398	0.268	114.54 NA	91101	0.003421751
0.003154762	0.316	64 NA	131808	0.003720238
0.002680115	1	172.86 NA	83379	0.0029683
0.003333333	0.861	175 NA	148606	0.003084112

0.003577713	2	274 NA	74459	0.003577713
0.003104396	2	269 NA	112863	0.002802198
0.003072464	3.41	355.47 NA	75016	0.003652174
0.003048128	2	312 NA	160906	0.002834225
0.003164557	0.511	92 NA	84471	0.003227848
0.003089172	0.525	112.71 NA	81043	0.002929936
0.002749141	0.525	105.69 NA	100842	0.002611684
0.002554517	0.845	198.93 NA	124817	0.002897196
0.002965686	2	269.52 NA	74694	0.003602941
0.002679558	0.479	94 NA	69782	0.003287293
0.002809668	2	219 NA	249097	0.001873112
0.002526316	1	275 NA	172506	0.002078947
0.002852234	2	254.82 NA	116198	0.00347079
0.002715232	1	218 NA	126682	0.002913907
0.003938356	1	239 NA	128396	0.003116438
0.002864721	2	305 NA	141115	0.003236074
0.002566138	2	417 NA	163925	0.002830688
0.002958199	1	170 NA	98630	0.003472669
0.00293578	0.928	144.87 NA	95285	0.003761468
0.002716418	2	390 NA	95134	0.002895522
0.002650602	1	288.99 NA	99656	0.002801205
0.003114286	0.957 NA	NA	127686	0.002914286
0.004514286	1	201 NA	129856	0.002771429
0.003493671	1	281 NA	98169	0.003594937
0.004674556	1	264.21 NA	127107	0.003579882
0.002883212	2	217.44 NA	127527	0.003394161
0.002711864	1	189 NA	117538	0.00251816
0.00283293	0.704 NA	NA	160860	0.002251816
0.002748691	1	120 NA	11791	0.003010471
0.002614555	1	231 NA	108734	0.002938005
0.002997416	0.856	349 NA	91360	0.003229974
0.003	1	194 NA	173802	0.002757576
0.002695925	2	244 NA	229840	0.003134796
0.002651297	1	135 NA	100000	0.002939481
0.003051282	1	204 NA	102146	0.003153846
0.003325	2	278 NA	57946	0.002775
0.003630769	1	156 NA	195350	0.002461538
0.003058824	0.807	157 NA	92739	0.002705882
0.003132911	0.944	196 NA	58414	0.003670886
0.002691293	1	240.9 NA	126036	0.002902375
0.002741514	1	309 NA	82803	0.00305483
0.002817337	0.942	195 NA	99032	0.003839009
0.003086053	1	222 NA	106207	0.003442136
0.003098592	1	289 NA	120391	0.002591549
0.003106796	1	226.95 NA	91041	0.003915858
0.002647059	2	179 NA	126933	0.002941176

0.002923077	2	309 NA	138791	0.002646154
0.0031	1	314 NA	55222	0.0036
0.003289474	0.523	132 NA	96165	0.003190789
0.00300578	0.553	159.81 NA	77018	0.003294798
0.003298969	0.402	142 NA	112630	0.00371134
0.002936047	2	326 NA	141975	0.002354651
0.002814815	1	318 NA	117657	0.002444444
0.002473958	1.26	246 NA	129893	0.002916667
0.0024	1	177 NA	230329	0.002106667
0.00262069	1	277 NA	75800	0.003448276
0.002785924	0.801	221 NA	116881	0.003196481
0.0025625	0.721	417 NA	105120	0.003125
0.002737752	1.75	436 NA	107789	0.003832853
0.003	1	228.63 NA	114151	0.002657143
0.00299169	2	538 NA	119066	0.003795014
0.002941176	2	294 NA	156650	0.00247678
0.002915452	3	402 NA	164879	0.002653061
0.003058824	2	243 NA	124140	0.003352941
0.002730061	0.833	173.76 NA	100566	0.003466258
0.0029683	1	245 NA	111633	0.00314121
0.002969283	1.01	270 NA	95059	0.002901024
0.002565598	1	387 NA	138930	0.002507289
0.003789809	2	341 NA	184909	0.002101911
0.003352436	0.868	210.27 NA	85293	0.002836676
0.002996633	0.586	232 NA	73532	0.003164983
0.003069909	0.893	322.05 NA	99263	0.003465046
0.003745455	0.825	365 NA	169650	0.002909091
0.002964169	1	322.86 NA	130958	0.003127036
0.003062827	2	381 NA	152721	0.002905759
0.003282675	0.604	135 NA	122754	0.003708207
0.003399433	2	301 NA	181714	0.002974504
0.003323944	2	343 NA	80313	0.003239437
0.003361345	2	386 NA	148374	0.002997199
0.003412463	2	307 NA	131352	0.003115727
0.002975207	1.28	212.7 NA	141550	0.003553719
0.002581454	2	421 NA	165472	0.003132832
0.002994012	1	241 NA	136511	0.003982036
0.002960725	0.979	209 NA	94243	0.003232628
0.003076923	1	284 NA	95208	0.002679045
0.003133515	1	283 NA	127568	0.004032698
0.002802057	3.03	266 NA	203633	0.002802057
0.003028846	1	338 NA	105956	0.003245192
0.003258065	1	241 NA	103727	0.00283871
0.003343284	1	261 NA	106920	0.002985075
0.003581267	2	223 NA	175546	0.002672176
0.003228916	4	414 NA	178138	0.003831325

0.003435583	1	207 NA	146297	0.00309816
0.003058104	4	398 NA	166019	0.003272171
0.00309589	3	419 NA	143338	0.003643836
0.003771429	1.7	340.08 NA	129565	0.003285714
0.003267045	2	203 NA	154453	0.003011364
0.004675325	0.701	88 NA	190947	0.003084416
0.003250774	1	210 NA	154731	0.003219814
0.002710843	1	240.3 NA	123200	0.002560241
0.00305638	1	197 NA	140364	0.002937685
0.00304918	0.99	269 NA	111469	0.003704918
0.003038348	2	234 NA	93621	0.003421829
0.003150685	1	259 NA	137474	0.003253425
0.002791328	5	759 NA	143107	0.003279133
0.00338843	0.314	68 NA	100449	0.002947658
0.002663551	1.97	381 NA	190109	0.002570093
0.004746269	2	463 NA	152432	0.002208955
0.003083832	0.92	189 NA	68730	0.003443114
0.003229462	1	240.42 NA	124218	0.003116147
0.003128655	1	209.76 NA	131057	0.003099415
0.003163265	0.901	231 NA	95074	0.003231293
0.003682927	2.84	404.22 NA	115406	0.003121951
0.003411079	2	345.12 NA	185196	0.002827988
0.003264605	0.407	109.56 NA	238969	0.003333333
0.002777778	1	201.54 NA	182321	0.003111111
0.00311054	1	241 NA	95256	0.003316195
0.003096774	0.511	85 NA	130078	0.003290323
0.002985075	2	228 NA	132145	0.002477612
0.003079179	2	305.73 NA	134894	0.002756598
0.003613707	3	408 NA	177419	0.001931464
0.002996845	0.919	156 NA	192882	0.00214511
0.002766571	1.25	278 NA	99506	0.002564841
0.002641509	0.917	330.6 NA	175813	0.001725067
0.003190789	0.699	145 NA	200989	0.002927632
0.002882883	1	211 NA	247914	0.002792793
0.00366242	0.342	93.48 NA	195160	0.002579618
0.004294118	1	173.16 NA	169391	0.002029412
0.004259259	2	418 NA	170909	0.002910053
0.003669251	2	291.48 NA	104448	0.003229974
0.002779156	0.711	144.36 NA	107683	0.003449132
0.0032	1	155 NA	60632	0.0038
0.003116438	0.297 NA	NA	131955	0.003013699
0.002889518	0.7	141 NA	179077	0.003314448
0.003125	4	398 NA	216293	0.0025625
0.003136729	4	519 NA	132618	0.002949062
0.002897527	1	257.34 NA	132304	0.002791519
0.002857143	1	244 NA	190750	0.002857143

0.002852113	1	183 NA	125026	0.002746479
0.003157895	0.638	172 NA	93051	0.003473684
0.003610224	1	195 NA	107118	0.004057508
0.003926174	1.01	195 NA	179627	0.002516779
0.003371758	2	378 NA	268571	0.00221902
0.003405573	0.785	99 NA	148178	0.004179567
0.003143631	1	223.32 NA	147512	0.003333333
0.003135593	1	234 NA	127402	0.003022599
0.003276353	2	248 NA	122627	0.002905983
0.003253731	0.617	62.52 NA	147245	0.003164179
0.002717391	2	359 NA	86800	0.00326087
0.003256484	1	225 NA	91811	0.003659942
0.003382716	2	405 NA	151756	0.003234568
0.004124629	2	344.31 NA	165400	0.002373887
0.002768362	3	471 NA	201125	0.003615819
0.003038348	2	305.88 NA	191659	0.002418879
0.002729592	2.31	403.02 NA	101673	0.002806122
0.003033033	2	266 NA	102874	0.003093093
0.002710027	1	308 NA	100252	0.00300813
0.002839879	0.882	222 NA	78609	0.00347432
0.003314917	1	210 NA	86442	0.003121547
0.00316568	0.735	120 NA	161116	0.002544379
0.002983425	0.928	267 NA	86692	0.002955801
0.003015873	1	382 NA	126743	0.003333333
0.003286713	0.836	109 NA	84989	0.003251748
0.00309434	0.593	134 NA	95556	0.003735849
0.00438247	0.53	103.29 NA	116434	0.003306773
0.002769231	2.08	457 NA	101152	0.003205128
0.003206997	1	225 NA	97651	0.003177843
0.003606557	0.905	223 NA	109892	0.00304918
0.002857143	0.64	322 NA	134044	0.002255639
0.00301105	2	525 NA	97204	0.002845304
0.002816901	0.495	180 NA	91671	0.002394366
0.002977099	2	230 NA	70462	0.003307888
0.002888889	1	262 NA	137978	0.002583333
0.003592814	1	239.88 NA	80031	0.003922156
0.003473389	1	243.93 NA	93302	0.003529412
0.003123209	0.933	235.77 NA	131920	0.00286533
0.003150685	0.578	132 NA	138041	0.002684932
0.003573574	2	285 NA	144667	0.003783784
0.003608563	2	668 NA	99232	0.003027523
0.00375	1	443 NA	172871	0.003369565
0.004398827	1	247.59 NA	122378	0.003255132
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0.003072289	1	220 NA	166600	0.003012048

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0.003291536	NA	NA	NA	72640	0.003918495
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0.003140496	2	829	NA	113463	0.00338843
0.0032	NA	NA	NA	137645	0.003542857
0.002977528	NA	NA	NA	103395	0.003342697
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0.003622291	NA	NA	NA	126264	0.003281734
0.003605442	NA	NA	NA	132988	0.002891156
0.003050847	NA	NA	NA	117531	0.002745763
0.003546326	2	250.05	NA	117800	0.003194888
0.003204748	1	297.09	NA	139676	0.002195846
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0.002910663	3	360.99	NA	103304	0.003314121
0.003049451	2	317	NA	66245	0.003818681
0.002867647	1	334.32	NA	150248	0.003357843
0.002609819	1	419	NA	141869	0.002764858
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0.003235294	2	242	NA	63188	0.00355615
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0.003905109	1	297	NA	202308	0.00379562
0.003029316	1.15	236	NA	140947	0.003713355
0.003573883	0.923	174	NA	208930	0.002955326
0.003068966	1	269	NA	176779	0.002655172
0.003355932	0.816	183	NA	228791	0.003084746
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0.003435754	1	204	NA	57458	0.002681564
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0.003775216	1	281 NA	168389	0.003256484
0.002707775	2	365.73 NA	188730	0.00308311
0.003082707	2	546.33 NA	190959	0.003082707
0.003014493	2	320.88 NA	305650	0.002318841
0.002961783	2	327.21 NA	75639	0.00388535
0.00343949	3	381.75 NA	38579	0.003407643
0.003222591	1	193.02 NA	174483	0.002890365
0.002774194	2	448 NA	195475	0.003193548
0.003043478	2	443.1 NA	188615	0.003043478
0.004092219	2	319.11 NA	78615	0.002997118
0.004325069	2	360.51 NA	84000	0.003333333
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0.003420366	0.404	107.01 NA	66168	0.002793734
0.00296729	2	346 NA	435859	0.001985981
0.002815789	2	260 NA	267170	0.002789474
0.003222222	3 NA	NA	309861	0.002805556
0.003723077	4	601 NA	494411	0.002246154
0.003122807	0.969	227 NA	117700	0.002807018
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0.002931034	0.969	227 NA	110923	0.002988506
0.003295455	2	248 NA	111636	0.0028125
0.003421829	2	261.15 NA	61246	0.00359882
0.003169231	2	293.22 NA	113814	0.002646154
0.002700535	2	368 NA	97391	0.003074866
0.002887139	2	448.29 NA	51186	0.003097113
0.003128834	0.724	68 NA	88722	0.002208589
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0.002765957	2	273 NA	118517	0.002705167
0.002956522	2	291 NA	121579	0.002202899
0.002779783	0.973	117 NA	137211	0.002743682
0.003070175	1	183 NA	201800	0.002339181
0.002825553	2	345 NA	77460	0.003366093
0.003125	3	419 NA	151508	0.00203125
0.003095975	3	420 NA	93818	0.002724458
0.003220859	3	365 NA	114202	0.002730061
0.003387534	2	236 NA	122350	0.002168022
0.003831776	2	258 NA	111600	0.002803738
0.003081967	3	377 NA	135314	0.002295082
0.003377049	1	145 NA	132430	0.00304918
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0.003353659	2	304 NA	87388	0.002591463
0.003068592	2	236 NA	74376	0.003646209
0.00304878	2	228 NA	87236	0.002713415

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0.003746631	0.933	151	NA	127243	0.002991914
0.003465909	0.889	231.03	NA	146800	0.002840909
0.003661538	2	367.08	NA	241333	0.002030769
0.002731377	5	683	NA	174824	0.003069977
0.002803235	2	521.37	NA	91364	0.002884097
0.002666667	1.97	413	NA	214514	0.002592593
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0.003128834	1.4	220.44	NA	133136	0.002484663
0.003074324	2	251	NA	66257	0.003412162
0.003393502	3	333	NA	107423	0.003501805
0.003055556	1	191.55	NA	91814	0.003412698
0.003585526	1	166	NA	171160	0.002664474
0.003218391	4	445	NA	112613	0.003189655
0.00349162	1	71.73	NA	262154	0.002541899
0.003022599	5	574.86	NA	146667	0.002118644
0.00319209	3	380	NA	164658	0.002062147
0.002826552	2	348	NA	132921	0.002976445
0.002850877	2	300	NA	240346	0.001776316
0.002679128	0.489	76	NA	137933	0.002772586
0.002719033	2	333	NA	167798	0.002990937
0.002762431	1	247	NA	93755	0.003839779
0.002866667	0.916	149.01	NA	134065	0.0031
0.002679558	2	321	NA	171623	0.002928177
0.003181818	2	282	NA	128633	0.004488636
0.002834891	2	331	NA	250341	0.002554517
0.002442529	3	546.06	NA	187912	0.002614943
0.002878788	2	275	NA	148076	0.003181818
0.003375796	3	373.8	NA	173432	0.003025478
0.002754821	1	219	NA	212364	0.003333333
0.003017751	0.72	81.39	NA	164371	0.002869822
0.003590504	2	228.6	NA	182095	0.002492582
0.003072776	1	76	NA	182813	0.00245283
0.002933333	1	116.37	NA	114679	0.002986667
0.002404372	0.928	196	NA	167026	0.003142077
0.002554945	2	341	NA	168180	0.003049451
0.003155216	3	265	NA	140727	0.002519084
0.002985075	1	235	NA	158071	0.00278607
0.00306383	0.721	142.17	NA	185211	0.003234043
0.002678571	0.807	152	NA	199048	0.003
0.002820513	0.216	229	NA	160078	0.003301282
0.003053691	0.495	133.56	NA	199953	0.002852349
0.003114754	1	281	NA	102048	0.003415301
0.003317073	2	379.95	NA	164519	0.001878049
0.003226744	1	255	NA	150743	0.003052326
0.003389831	1	265.41	NA	130689	0.003446328

0.003972603	0.893	240.81	NA	97724	0.003369863
0.002798054	2	415	NA	276397	0.003430657
0.002980501	2	299	NA	189246	0.003398329
0.002764858	2	327.06	NA	150000	0.003100775
0.003026634	1.37	351.33	NA	272868	0.002566586
0.00337386	0.869	187	NA	217278	0.002948328
0.002991453	1	262	NA	279389	0.002051282
0.003184932	1	273	NA	220143	0.002876712
0.003652174	3	501	NA	204913	0.002666667
0.003064516	2	306	NA	144301	0.0025
0.00279597	1.47	254	NA	138857	0.002821159
0.003811881	0.503	121	NA	125862	0.002871287
0.003043478	1	176	NA	161213	0.002763975
0.002881356	0.948	281	NA	223724	0.002457627
0.002633053	1	283.05	NA	150385	0.002913165
0.002704082	1.72	292	NA	225592	0.002627551
0.003492063	1.22	167	NA	116923	0.003301587
0.003867925	0.639	81	NA	127512	0.003867925
0.002524272	1	162	NA	118816	0.003171521
0.002875399	2	268.08	NA	168082	0.00313099
0.00281457	1	243	NA	144913	0.003046358
0.002441176	1	227	NA	148800	0.002794118
0.003104478	2	227	NA	146574	0.003432836
0.002903226	1	253	NA	199423	0.002983871
0.002956522	2	353	NA	278295	0.001768116
0.003	0.854	83	NA	102381	0.003111111
0.003060686	2	236.58	NA	178471	0.002691293
0.003444816	2	220	NA	192419	0.003511706
0.003150685	1.61	260	NA	297962	0.001815068
0.00321875	2	359	NA	135907	0.0026875
0.003343465	0.699	65	NA	154526	0.00231003
0.002880886	1.3	261	NA	217196	0.002686981
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0.002811736	2	NA	NA	384455	0.002151589
0.00292876	2	286	NA	209279	0.003218997
0.003109541	3	381	NA	113875	0.002261484
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0.00331307	2	344	NA	125478	0.002796353
0.003842975	0.705	184	NA	116039	0.004256198
0.003150685	0.623	258.48	NA	132667	0.00230137
0.002694611	1	251	NA	103813	0.003203593
0.00280597	2	283	NA	132879	0.002716418
0.003074627	1	231.3	NA	107660	0.003164179
0.003020528	0.704	406	NA	163920	0.002932551
0.002923588	0.797	285.75	NA	129284	0.00269103

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0.003291139	0.078	399.84 NA	277333	0.003341772
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0.004251497	0.953	129 NA	182548	0.003712575
0.002790055	1	119 NA	284043	0.002569061
0.003114754	0.596	93 NA	282727	0.003005464
0.002917847	1	128 NA	220956	0.003201133
0.003125	0.601	133 NA	239234	0.002670455
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0.002717087	1	197 NA	282809	0.002633053
0.003088235	1	199 NA	156736	0.003198529
0.003099042	1	212 NA	173736	0.003386581
0.002628993	1	309 NA	130906	0.002604423
0.002723005	2	485 NA	102464	0.002629108
0.002815534	0.843	86 NA	172850	0.002588997
0.004054054	2	359 NA	88129	0.002513514
0.002919463	1	160 NA	117620	0.002651007
0.0029683	1.6	212 NA	113849	0.002680115
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0.002916667	2	396.09 NA	78433	0.003571429
0.002908497	2	486 NA	83695	0.003431373
0.002694301	2	341 NA	289435	0.00238342
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0.003631124	1	494.4 NA	133105	0.003025937
0.004	1	295.38 NA	108970	0.002828571
0.003382353	2	426.75 NA	190415	0.003117647
0.002700297	1	282.9 NA	124212	0.003353116
0.002822823	0.74	133 NA	134159	0.003393393
0.002713178	0.92	160.05 NA	205739	0.001782946
0.002724638	1	167.82 NA	143878	0.00284058
0.003232044	2	289 NA	150533	0.002486188
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0.003152174	2	211 NA	186368	0.002753623
0.003384146	0.834	160 NA	209907	0.003262195
0.002567976	1	216 NA	118101	0.002990937
0.002976879	1	183.12 NA	55738	0.003092486
0.002299169	2	181 NA	215714	0.00232687
0.004518828	1	180.87 NA	128411	0.004476987
0.003066667	1	202 NA	140560	0.002666667
0.002941176	1.24 NA	NA	123815	0.00302521
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0.003150685	1.12	217 NA	73302	0.002945205

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0.00303207	3	342.27	NA	102641	0.003002915
0.003258065	1	250	NA	77774	0.003419355
0.002833333	1	188	NA	170684	0.002194444
0.003027027	1	110.31	NA	100494	0.002405405
0.003028571	2	414	NA	191532	0.0022
0.003464052	1	153	NA	139175	0.003169935
0.003344828	0.724	109	NA	92939	0.00337931
0.003357143	1	135	NA	103673	0.0035
0.003152542	0.919	190	NA	165614	0.001932203
0.002989691	2	417	NA	122496	0.003221649
0.003044776	2	493	NA	189053	0.002835821
0.002886297	3	358	NA	119434	0.002886297
0.002783883	2	209	NA	199302	0.003150183
0.00368272	2	191	NA	120500	0.003852691
0.003087819	2	256	NA	221459	0.002407932
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0.002515723	1	205	NA	237418	0.002484277
0.003594306	2	241	NA	185800	0.002846975
0.003584906	1	201	NA	121026	0.002943396
0.004383562	2	221	NA	159549	0.002431507
0.004430769	2	144.03	NA	287525	0.001815385
0.002803738	1	213	NA	163170	0.003154206
0.003026316	0.808	223.14	NA	181319	0.002473684
0.002741117	2	575	NA	207840	0.002538071
0.003030303	1	284	NA	267913	0.002323232
0.002711864	1	180	NA	446474	0.002576271
0.003037975	2	160	NA	277204	0.002943038
0.002807571	1	204	NA	231616	0.002302839
0.002817337	1	160	NA	88500	0.003467492
0.002857143	2	343	NA	136000	0.002360248
0.003106509	3	436.92	NA	206926	0.003195266
0.002915452	1	256	NA	81451	0.003294461
0.002852761	2	314	NA	171569	0.003128834
0.002849003	2	242	NA	114982	0.003247863
0.003235294	0.901	212	NA	143596	0.003205882
0.003027027	1	309	NA	175570	0.00327027
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0.003135314	1	405.27	NA	283704	0.002673267
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0.002967742	2	305.19	NA	166947	0.003064516
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0.002840909	1	172.95	NA	149702	0.002670455
0.002833333	2	229	NA	124735	0.002722222
0.002833333	2	379	NA	168962	0.002888889
0.002595628	2	356	NA	333087	0.002513661
0.002567976	0.85	186	NA	242682	0.002567976
0.003223881	1	180	NA	120174	0.003432836
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0.002967742	2	191.07	NA	150167	0.003096774
0.002875	2	252.87	NA	151178	0.00228125
0.00352459	4	456.51	NA	193496	0.003360656
0.00314121	1	224	NA	142144	0.002795389
0.003037975	1	214	NA	309735	0.002101266
0.002586207	2	278	NA	150063	0.002729885
0.002979275	1	222	NA	214989	0.00246114
0.00330033	1	185.76	NA	187350	0.002640264
0.002612903	2	400	NA	254381	0.002709677
0.002439759	1	307	NA	194653	0.002951807
0.002875	1	180	NA	130766	0.0029375
0.003933518	1	181	NA	224681	0.002603878
0.002915452	1	228	NA	186356	0.002623907
0.003544304	1	207.18	NA	140602	0.002860759
0.00290411	2	293.4	NA	108517	0.003178082
0.002887701	2	422	NA	103789	0.003048128
0.002771429	1	217	NA	98433	0.003428571
0.002615741	0.946	296.22	NA	193116	0.001990741
0.002710027	1	279.75	NA	124687	0.002682927
0.002888283	1	269	NA	101236	0.003351499
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0.002666667	2	355 NA		123034	0.0029
0.002759857	2	308.79 NA		143571	0.003010753
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0.00318612	2	274.11 NA		123692	0.002460568
0.002822823	0.937	258 NA		127625	0.002882883
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0.002808989	2	265 NA		102936	0.002640449
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0.003037543	0.914	131 NA		92404	0.003037543
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0.003294118	2	405	0.003029412	144615	0.002676471
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0.003617747	1	187	0.003583618	141474	0.001945392
0.002895522	0.8	190	0.003462687	249488	0.001283582
0.00362776	0.81	183	0.002776025	135289	0.002839117
0.002637615	2	417.69	0.002844037	179167	0.002752294
0.003216216	1	311	0.003540541	124397	0.00327027
0.003003195	1	220	0.003258786	79774	0.003386581
0.00284345	2	295	0.003194888 NA		0.003354633
0.003119534	1	221.94	0.003265306 NA		0.002915452
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0.002702703	1.01	119	0.003243243	88043	0.002822823
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0.002831858	0.687	118	0.003451327	125143	0.002271386
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0.003365854	0.894	213	0.002853659	209567	0.002365854
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0.002875399	0.925	175	0.003290735	68559	0.002971246
0.002824207	0.793	106	0.002680115	71160	0.002881844
0.002956522	0.999	168	0.002869565	89835	0.00315942
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0.002748092	2	421	0.003333333	106167	0.003053435
0.002674419	1	379.11	0.003168605	121684	0.002761628
0.00341954	0.649	137.52	0.00341954	163309	0.002327586
0.002881356	2	495	0.003268765	109422	0.002179177
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0.003142857	0.839	270	0.003206349	121950	0.002539683
0.003268293	1.11	268	0.003536585	87385	0.002219512
0.003044619	1	239	0.003569554	109506	0.002230971
0.003132251	0.719	156	0.00324826	82931	0.002343387
0.003293839	1.59	381	0.003151659	84928	0.001635071
0.002589286	3	426	0.003363095	119895	0.002261905
0.003458213	5	278	0.003285303	259444	0.002074928
0.003248082	2	279	0.003222506	304667	0.001841432
0.003354037	0.857	188	0.003913043	131632	0.002701863
0.003225806	0.716	155	0.003870968	84810	0.002463343
0.003055556	1	350.07	0.003333333	107585	0.003271605
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0.003228571	2.87	360	0.0036 NA		0.002657143
0.00344	1.21	190.2	0.00336	200051	0.00208
0.003767705	2	231	0.003031161	67149	0.003994334
0.00341954	0.931	214	0.002844828	57755	0.002816092
0.003883792	1	321.84	0.003119266 NA		0.001834862
0.004	0.926	197.58	0.003735849 NA		0.002377358
0.002613982	1	275	0.003282675	66775	0.00337386
0.002474227	1	234	0.00314433	109468	0.002809278
0.003104478	0.468	75.9	0.003253731 NA		0.001701493
0.003066667	0.633	99.09	0.003422222 NA		0.001266667
0.002397094	1	347	0.003753027	142689	0.001476998
0.002606061	1	329	0.003636364	98438	0.003181818
0.002885906	1.43	195	0.00409396 NA		0.00147651
0.003084112	2	593	0.003146417	176250	0.000996885
0.002869318	2	537	0.003210227	149231	0.002215909
0.002636364	1	203	0.003060606	110884	0.002606061
0.002961039	0.971	252	0.003168831	108688	0.002415584
0.002718447	0.476	171.96	0.003139159 NA		0.002783172
0.003672727	0.43	127	0.004109091 NA		0.002581818
0.002561983	2	327	0.003057851 NA		0.001515152
0.002519894	1	278	0.002625995	174603	0.001671088
0.003125	2	340	0.00349537	79936	0.002893519

0.003378747	1.42	302	0.003297003	135048	0.003433243
0.00317757	2.78	399	0.00271028	142415	0.001238318
0.003602015	3	478.53	0.003879093	90140	0.00324937
0.003029316	1	175	0.003094463	130635	0.00276873
0.003221154	2	286	0.003966346	61927	0.002644231
0.003166227	1	333	0.003799472	78361	0.002189974
0.002733813	0.673	123	0.00294964	112606	0.001582734
0.003361823	1.72	252	0.003475783	203349	0.002450142
0.002861272	2	227	0.003728324	109774	0.003323699
0.002793427	3	485	0.00314554	127046	0.002558685
0.002402402	2	248.7	0.003633634	71461	0.002672673
0.002432432	1.67	311	0.003459459	116762	0.001702703
0.003049451	1	274.2	0.002747253	56475	0.002774725
0.002896725	1	211	0.002871537	179152	0.002493703
0.003524804	2	329	0.003446475	159097	0.002428198
0.002857143	1	272	0.003236152	96955	0.001953353
0.002933673	2	187	0.003877551	94914	0.002066327
0.003653846	0.477	182.67	0.003365385	31344	0.001955128
0.00408805	0.689	189	0.003553459	142902	0.001603774
0.002601156	1	324	0.003034682	103122	0.002369942
0.003102493	0.576	147.21	0.003130194	69658	0.003074792
0.003232044	0.805	101.76	0.002900552	109108	0.00179558
0.003699422	0.86	233.52	0.003583815	96875	0.001849711
0.003364486	1	218.4	0.003489097	79105	0.002367601
0.003965087	0.762	137	0.003042394	97519	0.002693267
0.003225806	0.994	183.96	0.003076923	75907	0.002133995
0.003465553	2	362	0.002901879	119429	0.001899791
0.002901786	1	343.71	0.003035714	124818	0.001964286
0.003254438	1	181	0.003047337	102551	0.00204142
0.003676012	1	254	0.003208723	82537	0.002554517
0.003133333	2	325	0.0033	89056	0.0024
0.003432343	2	361	0.003432343	26313	0.002112211
0.003154122	1	286.47	0.003584229	109928	0.00297491
0.003178082	2	200	0.003479452	173395	0.002356164
0.004044118	2	316	0.002867647	69506	0.002083333
0.003273657	2	265	0.003273657	84486	0.002736573
0.003275362	1	183	0.00342029	55477	0.003101449
0.002977099	1	401	0.003155216	53102	0.003231552
0.002955975	1	273	0.002830189	67842	0.002389937
0.00347973	1	156	0.003040541	61773	0.003277027
0.003	1	316	0.002848485	73720	0.002818182
0.003129032	2	270	0.003096774	74927	0.002645161
0.002865672	0.605	61	0.003134328	NA	0.003253731
0.003291925	1	181	0.003354037	NA	0.003447205
0.003770492	1	273	0.003114754	NA	0.002896175
0.003604061	0.986	239.49	0.002664975	NA	0.00180203

0.002894057	0.698	185	0.002997416	74244	0.002118863
0.003013699	0.433	131	0.00309589	50752	0.003424658
0.003413793	2	258	0.003137931	NA	0.002310345
0.003694915	1	272	0.003288136	NA	0.003084746
0.003574879	3	619.47	0.003357488	92044	0.002173913
0.003284672	1.71	252	0.003090024	88471	0.002068127
0.003247588	0.432	134	0.003151125	82308	0.002508039
0.004194444	0.853	150.12	0.003138889	55053	0.003166667
0.003272251	1	286	0.003010471	81851	0.001753927
0.003218143	1	272	0.002721382	73983	0.002483801
0.002621622	0.927	324	0.003	54017	0.003162162
0.003527397	1	249	0.003219178	81569	0.003493151
0.003245614	2	385	0.002894737	60256	0.002280702
0.003494424	0.98	207	0.003420074	108211	0.001412639
0.003233831	0.87	174	0.003109453	52756	0.002238806
0.003475	0.677	59.31	0.0031	50735	0.002925
0.003208092	0.914	203.1	0.003150289	56198	0.002919075
0.0041247	1	241	0.003501199	71333	0.002158273
0.002970297	0.877	180	0.00330033	75100	0.002640264
0.002782609	0.983	NA	0.003043478	83868	0.002637681
0.002822581	NA	NA	0.002768817	NA	0.00266129
0.003426966	NA	NA	0.002977528	NA	0.001910112
0.003170732	NA	NA	0.003109756	NA	0.002896341
0.003368056	0.262	NA	0.003159722	NA	0.002361111
0.003106796	0.467	128	0.003851133	NA	0.002750809
0.002614213	0.724	186	0.003248731	NA	0.001979695
0.003050398	0.7	136	0.003183024	NA	0.002228117
0.003034301	0.344	163	0.003166227	NA	0.002691293
0.004521964	0.397	137.46	0.002945736	NA	NA
0.003222892	0.661	75	0.003614458	NA	0.002379518
0.002744186	2	275	0.003372093	NA	0.001744186
0.00295082	0.404	50.94	0.00347541	NA	0.002918033
0.002460568	0.629	102	0.003059937	NA	0.001451104
0.003191489	1	246	0.003212766	NA	0.001489362
0.003364486	0.334	98	0.003714953	NA	0.002266355
0.002704225	0.907	247.38	0.003211268	92449	0.002760563
0.002663317	0.728	408	0.003517588	119455	0.002211055
0.002810651	2	419	0.003313609	NA	0.002514793
0.002905759	2	361	0.003167539	NA	0.002748691
0.0026875	3	291	0.003125	NA	0.00259375
0.003	2	291	0.003310345	NA	0.002103448
0.003142077	1	254	0.003142077	NA	0.002076503
0.002763419	1	509	0.003240557	NA	0.00139165
0.003614458	1.83	330.36	0.003283133	NA	0.001927711
0.003461538	1	259	0.003333333	NA	0.002871795
0.002732733	2	302.73	0.003303303	NA	0.002582583

0.003141994	0.716	199	0.00347432	NA	0.002084592
0.002737127	2	410	0.003495935	NA	0.002384824
0.002704225	2	345.3	0.003943662	NA	0.002
0.003134328	0.9	166	0.003701493	88727	0.002955224
0.003141026	0.533	186	0.0025	77980	0.003237179
0.003671875	0.892	209	0.002851563	120114	0.002734375
0.003045267	0.481	129	0.003127572	87831	0.002921811
0.002836186	0.919	246	0.003154034	91429	0.002396088
0.002603939	1	299	0.002910284	90240	0.002188184
0.002450766	0.766	255.75	0.00249453	109798	0.00238512
0.002975	0.592	238.65	0.002925	80675	0.002075
0.002674699	2.12	490	0.002987952	NA	0.002192771
0.002744186	1	319	0.002860465	NA	0.00244186
0.002763533	2	231	0.003475783	118392	0.002763533
0.002893082	1	204	0.003584906	73018	0.003459119
0.00309375	1	269	0.0029375	136527	0.00284375
0.003103448	1	495	0.003103448	185864	0.002528736
0.003564356	2	252	0.003135314	75458	0.003168317
0.002838284	1	210.54	0.00330033	60336	0.003531353
0.003068182	2	535.47	0.003238636	139160	0.002840909
0.003414634	0.581	128	0.003719512	96172	0.002835366
0.003883495	0.887	163.02	0.003203883	125714	0.002265372
0.003279221	0.753	119.43	0.003376623	97910	0.002175325
0.003782991	0.884	213.33	0.003313783	117793	0.00170088
0.003839779	2	458	0.003314917	108400	0.003038674
0.003805556	1	404	0.003972222	106772	0.003166667
0.002906667	1	281	0.003253333	114680	0.002666667
0.002765363	1	300.72	0.003240223	119614	0.002318436
0.00280303	4.74	739	0.002853535	157348	0.002247475
0.002722222	2	451.65	0.003027778	170349	0.00175
0.003090909	2	303	0.003116883	232788	0.001714286
0.00303125	2	249	0.00309375	125947	0.002375
0.002814371	0.871	156	0.003532934	103105	0.002275449
0.003323529	1	227	0.003647059	84040	0.002941176
0.002873563	1	328	0.003017241	252541	0.002126437
0.002431694	2	349.98	0.003551913	186430	0.00215847
0.002852113	2	358	0.003450704	NA	0.002640845
0.003235294	1	275	0.003888889	NA	0.002091503
0.004670051	2	422	0.003121827	NA	0.002208122
0.002955801	2	361	0.003149171	NA	0.003839779
0.002702703	0.847	341	0.003864865	133867	0.002027027
0.003179191	1	458	0.003265896	124832	0.002919075
0.003434343	1	223.8	0.003737374	NA	0.002289562
0.002785515	0.956	265	0.003231198	NA	0.002479109
0.00240099	3	377	0.00269802	NA	0.002252475
0.002674419	2	296	0.002877907	NA	0.001802326

0.00309589	4	490	0.003123288	NA	0.002383562
0.003048433	0.531	245.73	0.002877493	122448	0.001908832
0.003343653	0.854	125	0.002941176	134203	0.002136223
0.003286908	0.745	104	0.002924791	97486	0.002924791
0.003033175	0.689	247.14	0.002701422	173037	0.001919431
0.002782609	1.97	287	0.004086957	136412	0.001971014
0.002899408	3	407	0.003668639	124950	0.002366864
0.003216216	NA	NA	0.003081081	NA	0.002594595
0.002788732	NA	NA	0.003408451	NA	0.004084507
0.002664908	NA	NA	0.003192612	NA	0.002453826
0.002405405	NA	NA	0.003081081	NA	0.002027027
0.003136792	NA	NA	0.003018868	NA	0.002075472
0.004273319	NA	NA	0.003123644	NA	0.002668113
0.002916667	NA	NA	0.003055556	NA	0.002777778
0.002949062	NA	NA	0.002949062	NA	0.002520107
0.003154574	2	418.89	0.0029653	123300	0.002523659
0.002866667	2	295	0.0034	117951	0.002733333
0.00280112	NA	NA	0.003109244	NA	0.002072829
0.003030303	NA	NA	0.002947658	NA	0.002396694
0.003487544	2	228	0.005124555	77682	0.003131673
0.003786765	1	834.66	0.003492647	63765	0.003125
0.002969188	2	286	0.003277311	142222	0.002773109
0.003106509	2.31	428.07	0.003343195	129867	0.002218935
0.002994505	0.683	228	0.002884615	70000	0.001758242
0.003431953	1	222	0.002751479	72731	0.003076923
0.00328	2.02	299	0.002906667	161349	0.002213333
0.00295082	2	364	0.002482436	276839	0.001451991
0.006938111	1	191	0.003127036	90882	0.002214984
0.003445783	2	335	0.003277108	100341	0.001975904
0.00280112	NA	NA	0.003501401	NA	0.002352941
0.002560386	1	212	0.003429952	114902	0.002463768
0.002894737	NA	NA	0.003187135	NA	0.002923977
0.002585752	NA	NA	0.002770449	NA	0.002480211
0.003237179	NA	NA	0.003525641	NA	0.003461538
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0.00269103	NA	NA	0.003322259	NA	0.002890365
0.003306773	NA	NA	0.003346614	NA	0.003187251
0.003829201	NA	NA	0.003415978	NA	0.003057851
0.003805556	NA	NA	0.00325	NA	0.001861111
0.003875	NA	NA	0.003125	NA	0.0019375
0.003064067	NA	NA	0.003259053	NA	0.002144847
0.003653251	NA	NA	0.003869969	NA	0.003436533
0.003188406	NA	NA	0.003804348	NA	0.002789855
0.002599532	NA	NA	0.003091335	NA	0.002459016
0.002635294	NA	NA	0.003105882	NA	0.001670588
0.002632979	NA	NA	0.002978723	NA	0.00231383

0.002935065	NA	NA	0.003142857	NA	0.002441558
0.002544081	NA	NA	0.003173804	NA	0.002141058
0.003005952	NA	NA	0.003482143	NA	0.003065476
0.002896341	NA	NA	0.00304878	NA	0.002865854
0.002541899	NA	NA	0.00301676	NA	0.002486034
0.00298913	NA	NA	0.003478261	NA	0.002934783
0.003054054	NA	NA	0.003216216	NA	0.002702703
0.002405797	NA	NA	0.003797101	NA	0.00284058
0.002549575	NA	NA	0.003031161	NA	0.001869688
0.002614379	2	197.52	0.003562092	70894	0.003071895
0.002967914	3	709.59	0.003475936	176933	0.002406417
0.003070423	3	535	0.002619718	219027	0.002084507
0.00360119	3	488	0.003541667	222734	0.00235119
0.002973761	3	405	0.003586006	118455	0.002944606
0.003218391	2	340	0.003304598	134108	0.002672414
0.002751196	3	407	0.003133971	125952	0.002009569
0.003076923	NA	NA	0.003609467	NA	0.002100592
0.002819149	NA	NA	0.003138298	NA	0.002819149
0.002486631	NA	NA	0.003074866	NA	0.002459893
0.002772586	NA	NA	0.003115265	NA	0.00271028
0.003236152	NA	NA	0.003440233	NA	0.003265306
0.002822086	NA	NA	0.003496933	NA	0.002116564
0.003011364	NA	NA	0.003295455	NA	0.002840909
0.002902208	NA	NA	0.00384858	NA	0.002807571
0.002684932	NA	NA	0.00290411	NA	0.002246575
0.003193548	NA	NA	0.003096774	NA	0.003
0.002887473	2	325	0.003036093	104308	0.001380042
0.003114754	1	311	0.002880562	112677	0.002903981
0.002634921	2	252	0.002888889	129723	0.002063492
0.002704403	2	344	0.002830189	99412	0.003207547
0.003150183	NA	NA	0.003040293	NA	0.003076923
0.003312693	NA	NA	0.003467492	NA	0.0025387
0.00318408	NA	NA	0.002935323	NA	0.00199005
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0.002835052	NA	NA	0.002680412	NA	0.002293814
0.002603687	NA	NA	0.002834101	NA	0.002327189
0.002640587	NA	NA	0.002811736	NA	0.001711491
0.002846975	NA	NA	0.003451957	NA	0.002775801
0.003105802	NA	NA	0.003447099	NA	0.002354949
0.003085106	NA	NA	0.00337766	NA	0.002154255
0.002564103	NA	NA	0.003410256	NA	0.001948718
0.002896175	NA	NA	0.002923497	NA	0.001939891
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0.003105413	NA	NA	0.003618234	NA	0.003048433
0.003067916	NA	NA	0.003700234	NA	0.002318501
0.003046875	NA	NA	0.003541667	NA	0.001927083
0.003088235	NA	NA	0.003088235	NA	0.002852941
0.002567568	NA	NA	0.002783784	NA	0.002027027
0.002716763	NA	NA	0.003352601	NA	0.002601156
0.002828947	NA	NA	0.003618421	NA	0.002927632
0.002862903	NA	NA	0.00358871	NA	0.003145161
0.002676471	NA	NA	0.003382353	NA	0.002882353
0.003104575	NA	NA	0.003986928	NA	0.002810458
0.002894737	NA	NA	0.002982456	NA	0.002894737
0.002978723	NA	NA	0.00343465	NA	0.002553191
0.003050847	NA	NA	0.003644068	NA	0.003135593
0.002877493	NA	NA	0.003276353	NA	0.003703704
0.003163265	5	578	0.002857143	120326	0.001755102
0.002822967	1	128.19	0.003014354	102868	0.002535885
0.002746269	0.922	158.79	0.00358209	75513	0.003432836
0.003071429	NA	NA	0.003785714	NA	0.002928571
0.003066667	NA	NA	0.003366667	NA	0.0021
0.003204748	1	158	0.003175074	124527	0.002700297
0.003202847	0.568	159.3	0.003380783	76000	0.002846975
0.003493671	1	223	0.003493671	73752	0.002658228
0.003583815	1	260	0.003439306	NA	0.002774566
0.002960526	1	206	0.003421053	82421	0.0025
0.003264706	2.46	296.91	0.003647059	92714	0.002470588
0.002716049	2	285.18	0.005012346	99213	0.003135802
0.002472826	1	158	NA	76623	0.002092391
0.003157895	1	229	NA	126950	0.002339181
0.002980769	0.399	181	NA	66904	0.002339744
0.002753247	2	353.1	NA	131773	0.002285714
0.002606516	2	270	NA	129219	0.002631579
0.002835366	2	239.97	NA	109943	0.00320122
0.002882883	1	283	NA	128404	0.002972973
0.003714286	1	189.96	NA	145560	0.003174603
0.00271875	1	296	NA	75176	0.00425
0.003289474	1	310	NA	77677	0.003059211
0.003385827	0.625	150	NA	67556	0.003543307
0.00324	0.129	90	NA	88162	0.00296
0.003162651	0.446	140	NA	65673	0.003313253
0.002618384	0.648	244	NA	110140	0.003175487
0.002753623	0.786	149	NA	60329	0.00307971
0.00258567	0.645	149.7	NA	64047	0.002679128
0.00284375	0.585	156	NA	64308	0.00284375
0.002852349	0.594	123	NA	68674	0.002986577

0.003310811	0.48	209 NA	78925	0.003141892
0.003029491	2	472 NA	193639	0.002225201
0.002905405	1	247 NA	118410	0.002804054
0.003580247	1	247 NA	92531	0.003024691
0.002837838	2	302 NA	124884	0.002567568
0.003078947	0.994	213 NA	83068	0.002710526
0.00290404	2	257 NA	151871	0.001565657
0.003954248	0.872	201.99 NA	61647	0.002777778
0.003536585	1.78	360 NA	62815	0.003292683
0.003773087	1	346 NA	75218	0.002295515
0.00361039	2	316 NA	191960	0.002571429
0.00269697	1.72	234.66 NA	88674	0.00269697
0.003051771	0.982	144 NA	53260	0.00346049
0.003305556	2	228 NA	59458	0.003277778
0.002774194	1	165 NA	95294	0.002741935
0.003142857	0.498	116 NA	85360	0.003571429
0.003265306	1	172.95 NA	118265	0.002823129
0.00337884	0.692	204 NA	117365	0.002901024
0.002798635	0.999	314.73 NA	83253	0.003105802
0.003100304	1	220.62 NA	151200	0.002431611
0.002823129	1	229 NA	63301	0.003503401
0.0032	0.636	109.5 NA	56576	0.00352
0.002766571	0.527	105 NA	105731	0.002997118
0.002734375	0.751	129 NA	119562	0.002851563
0.002996743	0.648	161 NA	62200	0.003908795
0.002944444	0.814	181 NA	78243	0.002972222
0.002664671	0.399	108 NA	92000	0.002994012
0.003639344	0.855	200 NA	50598	0.003836066
0.002535613	0.928	147 NA	138476	0.002393162
0.00284507	0.86	223 NA	67447	0.002647887
0.002742857	0.719	131.22 NA	62484	0.003542857
0.002988506	0.796	168 NA	51415	0.003534483
0.003190883	0.766	140.82 NA	56640	0.003561254
0.0032	0.582	102.99 NA	101560	0.003333333
0.003109244	0.614	199 NA	103360	0.00280112
0.003065903	0.848	135 NA	58705	0.003982808
0.00306338	0.785	157 NA	65057	0.00306338
0.003551724	0.901	164 NA	58755	0.003655172
0.002898089	2	293.04 NA	151259	0.001719745
0.003479381	1.98	407 NA	112809	0.002293814
0.003130699	1	225 NA	53170	0.003221884
0.003266667	0.78	237.9 NA	97351	0.002466667
0.002638436	1.39	136.05 NA	104211	0.003094463
0.002785235	1	319 NA	102688	0.002147651
0.003048433	1	495 NA	95692	0.002592593
0.002911765	1	308 NA	139609	0.002705882

0.003811075	3	639 NA	170286	0.002052117
0.003307692	4	745.2 NA	169200	0.002307692
0.002827586	2	345 NA	125614	0.001965517
0.002861111	3	688.68 NA	179680	0.002083333
0.003317422	2	335 NA	120549	0.002434368
0.002987013	2	275.34 NA	87268	0.00212987
0.003070175	1	223 NA	94170	0.002748538
0.00325	1	192 NA	97511	0.0028125
0.003206997	0.716	200.91 NA	116877	0.00212828
0.002994186	0.819	193 NA	111698	0.003081395
0.002934473	1	256 NA	93293	0.002820513
0.002917933	1	232 NA	96708	0.002917933
0.003170732	0.535	168 NA	78366	0.003240418
0.003454545	0.978	185.37 NA	60812	0.003136364
0.002829268	1	394 NA	70473	0.002682927
0.003196931	2	447 NA	122704	0.001815857
0.003089172	0.804	164.07 NA	59455	0.003503185
0.00303125	1	287 NA	108329	0.00228125
0.002793651	1	239 NA	84000	0.002825397
0.00319209	1	274.68 NA	70796	0.002909605
0.003118644	0.783	149 NA	68565	0.003118644
0.003415385	1	186 NA	49699	0.003476923
0.002991453	2	321 NA	148919	0.002108262
0.003194444	0.853	170 NA	84383	0.003194444
0.003371758	2	269 NA	95470	0.002391931
0.00306962	0.604	162 NA	70680	0.003259494
0.002924791	1	189.93 NA	84038	0.002896936
0.002661064	0.979	213 NA	98040	0.00280112
0.002628205	0.859	170.91 NA	120623	0.002467949
0.003002833	1	292 NA	80613	0.003512748
0.002932099	1	192 NA	90138	0.003580247
0.003092486	1	225 NA	83200	0.002745665
0.004369231	1	207 NA	85286	0.003446154
0.003446154	0.82	175.26 NA	70063	0.002923077
0.003882353	0.497	140.67 NA	93591	0.002735294
0.002890173	1.08	209 NA	84911	0.002283237
0.003203883	0.44	148 NA	64991	0.003527508
0.002617647	1	278 NA	67652	0.002705882
0.003506849	1	299 NA	118323	0.002547945
0.003673469	1	235 NA	119636	0.001924198
0.00265896	3	478 NA	64787	0.003526012
0.002727273	1	339 NA	83721	0.002895623
0.003178484	3	342.57 NA	77752	0.002567237
0.002987013	2	325 NA	74538	0.002415584
0.002836676	1	163 NA	68383	0.003295129
0.002852941	0.622	159 NA	56139	0.003382353

0.003264095	0.992	179	NA	127571	0.002492582
0.002923977	1	211.74	NA	182560	0.002192982
0.005954198	2	296	NA	99170	0.002697201
0.002534435	0.971	137	NA	85103	0.003195592
0.003387978	1	277	NA	107858	0.003087432
0.003324324	0.62	222	NA	152739	0.002486486
0.00286533	1	497	NA	104600	0.003438395
0.003074627	1	476.1	NA	110112	0.003731343
0.002820513	4	446.55	NA	137091	0.002820513
0.003039216	1	243	NA	119636	0.002875817
0.00269962	0.748	166	NA	107294	0.002585551
0.003224299	0.483	102	NA	91614	0.003878505
0.002964286	0.503	108	NA	99814	0.003071429
0.003343373	3	701.64	NA	123673	0.003313253
0.0029	0.952	423	NA	169433	0.002233333
0.003085714	2	225	NA	97322	0.003457143
0.003118812	0.854	174.3	NA	75346	0.003787129
0.003117647	0.983	194	NA	140440	0.002676471
0.002848485	1	220.02	NA	129465	0.003060606
0.00239782	0.606	384	NA	150038	0.002833787
0.002950311	0.778	189	NA	97843	0.003167702
0.003044554	0.63	221.55	NA	97824	0.003366337
0.003114754	0.503	131	NA	93257	0.003442623
0.00251497	0.646	142	NA	101036	0.003353293
0.002857143	0.372	91	NA	133159	0.002664093
0.002770701	0.966	137.31	NA	100974	0.00366242
0.002878338	0.076	65	NA	124688	0.002759644
0.003265993	0.271	138	NA	136753	0.002861953
0.00368254	0.559	249	NA	113811	0.003015873
0.004280936	2	274	NA	155027	0.002474916
0.004208861	0.75	220.35	NA	116183	0.003449367
0.003301887	1	224.31	NA	137773	0.002767296
0.003444816	1	211	NA	114776	0.002842809
0.002891892	NA	NA	NA	123649	0.003081081
0.002727273	NA	NA	NA	113571	0.003743316
0.002727273	0.706	643	NA	101010	0.002647059
0.002937063	1.47	591.39	NA	134959	0.002552448
0.00365625	3	356	NA	129853	0.00296875
0.002852113	2	328.56	NA	157397	0.00221831
0.003432343	5	620.28	NA	280862	0.002145215
0.003493151	2.07	276	NA	136186	0.002945205
0.002857143	3	428	NA	152144	0.00337386
0.003564955	1	202.77	NA	159776	0.003232628
0.002924528	1	318	NA	145708	0.003018868
0.003426966	1	311	NA	177627	0.003314607
0.003242321	1.9	257	NA	152190	0.003583618

0.002744063	2	311.97 NA	194345	0.003060686
0.002866044	2	476 NA	146510	0.00317757
0.003003663	2	288 NA	148162	0.003626374
0.003220339	2	284.43 NA	129410	0.003446328
0.002735294	2	350.58 NA	186212	0.0025
0.005464286	2	211 NA	189403	0.00275
0.0030033	0.963	186 NA	125682	0.00290429
0.003691756	2	219 NA	130849	0.002616487
0.003304598	1.09	258 NA	88110	0.003132184
0.002661499	1	448 NA	127754	0.003359173
0.0037	1	191 NA	126515	0.003233333
0.007887789	1	197 NA	240565	0.003036304
0.003501946	1	195.51 NA	52049	0.003190661
0.003233831	1.46	294.9 NA	83882	0.003383085
0.003582555	4	422 NA	95250	0.003489097
0.003249211	1	362 NA	137382	0.003470032
0.002926829	1	254 NA	104808	0.003170732
0.002962963	1	172 NA	71694	0.003876543
0.002742382	2	379 NA	108040	0.002770083
0.00277937	2	518 NA	149271	0.003065903
0.002535211	1	307 NA	131176	0.003830986
0.002792023	1	200 NA	131207	0.003304843
0.003140496	0.992	210 NA	149647	0.003278237
0.002833876	2	239 NA	163720	0.003257329
0.002804533	2	329 NA	111143	0.003172805
0.005211268	1	180 NA	124124	0.003415493
0.003627451	2	228 NA	87961	0.003366013
0.003034301	1	270 NA	91178	0.003852243
0.002562189	1	222 NA	147742	0.002313433
0.003033708	1	269.88 NA	100717	0.002977528
0.004511278	3	576 NA	146704	0.002706767
0.003607748	1	238 NA	118330	0.002784504
0.00284507	2	193 NA	122351	0.003690141
0.003106509	3	456 NA	197593	0.003195266
0.003386667	2.5	476 NA	91241	0.003093333
0.003002915	3	386 NA	188138	0.002536443
0.003239437	2.77	356 NA	182754	0.00343662
0.002994652	1	411 NA	202161	0.002326203
0.002817259	4	476.94 NA	282541	0.001878173
0.003359788	0.753	187 NA	160185	0.002857143
0.003526012	2	283 NA	26604	0.003063584
0.003501684	1	349 NA	218538	0.003131313
0.002907609	0.678	211 NA	167292	0.002608696
0.003088685	0.56	140 NA	278144	0.002966361
0.003464052	0.888	158 NA	132087	0.003006536
0.002913669	2	338 NA	130528	0.00381295

0.003287197	0.954	152	NA	150278	0.002733564
0.003157895	2	431	NA	158622	0.002786378
0.003261456	2.72	294	NA	149961	0.002749326
0.002853026	2	318	NA	223292	0.003256484
0.002905983	NA	NA	NA	236000	0.003589744
0.002634271	2	273	NA	164781	0.003273657
0.003986014	0.907	171	NA	153667	0.003356643
0.002931034	1	248.13	NA	244629	0.003068966
0.00275	1	294.03	NA	312429	0.002625
0.003043478	2	348	NA	252596	0.002724638
0.002897727	NA	NA	NA	242584	0.003210227
0.002903226	NA	NA	NA	192875	0.003753666
0.003548387	0.744	139	NA	115767	0.003870968
0.006807018	1	209	NA	166571	0.002947368
0.003558559	NA	NA	NA	231830	0.004234234
0.003377049	NA	NA	NA	191522	0.004393443
0.002618454	1	344	NA	216224	0.002668329
0.002666667	1	331	NA	127220	0.003153846
0.003078947	NA	NA	NA	254364	0.002894737
0.002639752	NA	NA	NA	238903	0.003509317
0.002722372	0.805	246	NA	129345	0.003126685
0.002801205	2	332	NA	156077	0.00313253
0.002760563	1	193	NA	126419	0.003492958
0.002979798	1	220	NA	124504	0.003409091
0.002932551	NA	NA	NA	243101	0.002609971
0.002897436	NA	NA	NA	213391	0.002948718
0.003055556	NA	NA	NA	346182	0.003395062
0.00420712	NA	NA	NA	463565	0.002977346
0.002978723	1	208	NA	142973	0.00343465
0.003534483	1	233	NA	121094	0.003045977
0.002952646	0.89	305	NA	132215	0.00362117
0.003146417	0.778	169	NA	70881	0.004454829
0.003103448	1	231	NA	76424	0.004733542
0.003209877	1	252	NA	106713	0.003549383
0.002794457	4	599	NA	291096	0.002655889
0.003305556	1.92	369.87	NA	230634	0.003416667
0.002857143	1	137	NA	69187	0.003333333
0.002702703	1	218.82	NA	115957	0.003590734
0.002748092	1	179	NA	67967	0.004580153
0.003240997	1	213.9	NA	127769	0.003351801
0.003451613	1	166	NA	112846	0.003967742
0.003529412	1.06	207.03	NA	157815	0.0035
0.003027778	2	270	NA	106977	0.003583333
0.003289902	2	230.88	NA	94826	0.002996743
0.00334507	1	214.71	NA	118579	0.003767606
0.002701754	0.284	183	NA	138131	0.003754386

0.003170732	1	194 NA	92473	0.003240418
0.003425197	0.945	192.48 NA	219243	0.002913386
0.004006515	2	409.74 NA	166615	0.003387622
0.00297491	2	268 NA	116356	0.003225806
0.003380282	2	524 NA	211640	0.003133803
0.003396947	2	330 NA	129922	0.002938931
0.003	1.2	277 NA	132207	0.003461538
0.002915663	2	552 NA	149451	0.002457831
0.003146067	1.95	303 NA	120286	0.002752809
0.00309973	2	447 NA	113308	0.002884097
0.003679525	0.95	265 NA	96000	0.003353116
0.003763158	1	307 NA	79034	0.003815789
0.002653061	1	338 NA	167362	0.002740525
0.002720588	2	804.24 NA	205638	0.003112745
0.002459459	1.52	241.17 NA	207009	0.003054054
0.002866044	2	324 NA	147798	0.003084112
0.003055556	0.849	149 NA	69081	0.003425926
0.002966507	1.23	250 NA	148727	0.002894737
0.002948718	2	371 NA	186933	0.003365385
0.002878338	1.74	491 NA	138569	0.003234421
0.002694611	2	217 NA	124484	0.003712575
0.00315942	2	265 NA	125096	0.003913043
0.002444444	1	228.03 NA	121302	0.004
0.002952646	1	182 NA	142118	0.003314763
0.002979452	2	245 NA	140943	0.003630137
0.003047945	1	240 NA	171023	0.002945205
0.003261456	2	384 NA	197486	0.002830189
0.003188011	1	404.46 NA	170915	0.003514986
0.002815249	2	336 NA	160697	0.003196481
0.002693498	1.69	415 NA	105216	0.003157895
0.002719033	1	197 NA	132800	0.003323263
0.002967033	1	244 NA	161899	0.00271978
0.00327957	2	489 NA	377915	0.001908602
0.003138889	2	463.08 NA	194467	0.003333333
0.003119534	1	427 NA	168928	0.003644315
0.002935484	1	349 NA	230051	0.002516129
0.003062331	0.795	204 NA	182250	0.002601626
0.003019802	1	281 NA	400432	0.001831683
0.003613232	2	409.53 NA	226387	0.00302799
0.005032895	1	296 NA	203958	0.003125
0.003970588	1	341.13 NA	238500	0.002352941
0.003297872	2	338 NA	257014	0.00251773
0.002951289	1	271 NA	144387	0.003553009
0.002471591	0.794	221 NA	107000	0.003295455
0.003416149	0.957	229.35 NA	197010	0.003198758
0.003013245	0.367	134 NA	88835	0.003807947

0.003173653	0.809	185 NA	104000	0.003772455
0.003151927	2	561.18 NA	204444	0.002653061
0.002751323	1	261 NA	145971	0.003703704
0.003136729	0.817	213 NA	142571	0.003753351

QUICKI	RetroFat	RetroFat/BW	RigKid/BW	BLNoTail
NA		5.25	0.013461538 NA	20.3
NA		4.72	0.012453826 NA	20.3
0.887816622		4.44	0.012869565 NA	21.6
0.677397873		2.85	0.011728395 NA	20.3
0.805382482		4.8	0.014678899 NA	21.6
1		3.34	0.01073955 NA	21.6
0.520095054		5.55	0.014643799 NA	22.9
0.49168422		4.81	0.012792553 NA	21.6
0.555198795		3.15	0.0105 NA	20.3
0.81128334		2.62	0.009160839 NA	20.3
0.610642349		3.43	0.009098143 NA	20.3
0.660971551		2.49	0.007661538 NA	20.3
0.646655161		5.03	0.01457971 NA	20.3
0.616087571		3.5	0.010736196 NA	19.1
0.690920692		3.32	0.00929972 NA	20.3
0.51125994		5.45	0.014690027 NA	21.6
0.637310905		2.35	0.006911765 NA	21.6
0.541120681		3.49	0.011044304 NA	20.3
0.499830814		3.58	0.011854305 NA	20.3
0.591597703		3.14	0.010328947 NA	19.1
0.578694007		3.94	0.01208589 NA	20.3
0.541881907		2.7	0.008852459 NA	NA
0.622288299		2.89	0.010034722 NA	17.8
0.503675822		3.03	0.010557491 NA	20.3
0.6354096		3.74	0.011333333 NA	20.3
0.525738993		2.56	0.009808429 NA	19.1
0.507710716		2.68	0.008375 NA	21.6
0.574733756		2.89	0.011468254 NA	17.8
0.509665588		2.97	0.009966443 NA	20.3
0.536078019		3.5	0.009722222 NA	NA
0.503809249		4.3	0.01152815 NA	20.3
0.521868737		4.85	0.013251366 NA	21.6
0.552153008		2.6	0.007471264 NA	21.6
0.536607134		4.16	0.012567976 NA	21.6
0.586375017		1.98	0.005928144 NA	20.3
0.487803815		5.71	0.014455696 NA	21.6
0.556567601		4.93	0.012905759 NA	20.3
0.521894563		7.4	0.0185 NA	22.9
0.540861223		4.85	0.012830688 NA	22.9
0.431714092		5.95	0.015139949 NA	22.9
0.494786565		6.49	0.017399464 NA	NA
0.635779805		3	0.008450704 NA	NA
0.645781133		3.73	0.011371951 NA	17.8

0.611740991	3.65	0.010055096 NA	20.3
0.598621156	5.38	0.015594203 NA	21.6
0.583067624	5	0.013661202 NA	20.3
0.681037776	3.11	0.008227513 NA	21.6
0.462561032	7.83	0.018466981 NA	20.3
0.526368547	4.65	0.013098592 NA	20.3
0.434304454	5.4	0.013267813 NA	21.6
0.48004442	3.88	0.012396166 NA	20.3
0.477966318	4.3	0.011977716 NA	20.3
0.520106283	4.35	0.012322946 NA	21.6
0.474164953	6.05	0.015921053 NA	NA
0.551618672	6.4	0.017112299 NA	NA
0.499299695	5.75	0.016197183 NA	20.3
0.517934699	4.54	0.01264624 NA	21.6
0.537175738	4.55	0.012198391 NA	21.6
0.556989647	2.9	0.00881459 NA	19.1
0.630547645	3.68	0.010635838 NA	20.3
0.498512086	4.96	0.013191489 NA	21.6
0.482779973	4.29	0.011532258 NA	20.3
0.48497254	6.76	0.016211031 NA	20.3
0.521097746	2.81	0.009243421 NA	20.3
0.505898768	2.9	0.009666667 NA	17.8
0.520489001	3.1	0.010197368 NA	20.3
0.514673394	5.23	0.01405914 NA	20.3
0.510019706	3.22	0.008586667 NA	20.3
0.479611871	3.27	0.010548387 NA	17.8
0.499329821	4.25	0.013322884 NA	17.8
0.526529346	4.58	0.013011364 NA	19.1
0.471435957	4.18	0.013269841 NA	19.1
0.498921986	3.05	0.010409556 NA	19.1
0.464233357	3.92	0.011073446 NA	20.3
0.493427673	4.8	0.014328358 NA	21.6
0.552725545	3.42	0.011672355 NA	19.1
0.528489919	3.19	0.009011299 NA	20.3
0.4738655	8.55	0.02394958 NA	20.3
0.417416319	5.25	0.015306122 NA	20.3
0.443869647	6.05	0.016395664 NA	20.3
0.535965792	2.08	0.006666667 NA	17.8
0.494330159	3.81	0.01237013 NA	19.1
0.4450348	4.17	0.011239892 NA	20.3
0.491958624	5.36	0.015626822 NA	20.3
0.497002898	3	0.00867052 NA	19.1
0.574010681	3.2	0.009846154 NA	19.1
0.507615928	1.9	0.006397306 NA	17.8
0.488376177	4.07	0.011529745 NA	20.3
0.457423799	3.29	0.010681818 NA	19.1

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0.519440851	3.5	0.011744966 NA	17.8
0.533271451	2.9	0.009634551 NA	20.3
0.537239534	6.18	0.015968992 NA	NA
0.450985108	4.16	0.01171831 NA	19.1
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0.602212666	2.63	0.007346369 NA	20.3
0.439678564	5.62	0.015189189 NA	20.3
0.469197689	4.34	0.012259887 NA	21.6
0.530855369	6.27	0.014217687 NA	22.9
0.407318538	14.76	0.032227074 NA	21.6
0.463157072	8.39	0.020216867 NA	21.6
0.467515037	8.57	0.021918159 NA	20.3
0.540444839	6.08	0.017988166 NA	20.3
0.631329934	3.42	0.010239521 NA	20.3
0.511344162	6.18	0.018284024 NA	20.3
0.521220045	6.68	0.017441253 NA	20.3
0.44745404	6.65	0.016878173 NA	21.6
0.496475765	2.46	0.007760252 NA	20.3
0.504804122	2.66	0.008159509 NA	20.3
0.48692771	4.03	0.013344371 NA	19.1
0.494774411	4.7	0.011032864 NA	21.6
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0.576363653	2.05	0.007243816 NA	20.3
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0.442431207	4.9	0.012894737 NA	21.6
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0.519040883	4.03	0.01330033 NA	19.1
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0.489404541	4.02	0.01244582 NA	20.3
0.524528221	3.75	0.010869565 NA	21.6
0.566582589	2.08	0.005875706 NA	21.6
0.502414681	5.55	0.015331492 NA	21.6
0.495810478	6.83	0.016223278 NA	22.9
0.569615573	2.86	0.008171429 NA	20.3
0.592971479	4.6	0.012637363 NA	20.3
0.519496559	3.5	0.010086455 NA	20.3
0.624632934	2.03	0.005486486 NA	21.6
0.547333527	2.28	0.00721519 NA	19.1
0.569186098	6.56	0.01592233 NA	21.6
0.518609811	5.61	0.013453237 NA	22.9
0.507632717	3.21	0.009331395 NA	20.3

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0.505061246	5.84	0.016088154 NA	20.3
0.490997847	5.04	0.016205788 NA	19.1
0.458636023	6.21	0.017013699 NA	20.3
0.490275897	5.77	0.016628242 NA	21
0.607312128	4.55	0.013226744 NA	22
0.402608714	10.33	0.023638444 NA	22
0.480308544	12.62	0.026794055 NA	23
0.547467318	3.65	0.011624204 NA	21
0.481355647	6.91	0.017318296 NA	22
0.536790528	4.8	0.014769231 NA	20
0.516349014	5.35	0.014116095 NA	21
0.489025163	7.83	0.019673367 NA	23.5
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0.446042315	5.96	0.017028571 NA	22
0.550869479	3.08	0.009535604 NA	21
0.482559575	4.49	0.013323442 NA	20
0.517395405	4.17	0.0130721 NA	19
0.492902472	3.16	0.009321534 NA	21.5
0.567139935	4.09	0.01278125 NA	20.5
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0.443340917	4.74	0.016808511 NA	21
0.45309743	4.68	0.013565217 NA	22
0.456379796	3.69	0.010453258 NA	22.5
0.52964219	3.02	0.009837134 NA	22.5
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0.537344815	5.16	0.016329114 NA	22
0.487854489	5.72	0.016823529 NA	20
0.472385946	4.5	0.014106583 NA	21.5
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0.497015419	4.03	0.011041096 NA	20.5
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0.698258118	6.28	0.017205479 NA	22
0.449736969	5.57	0.016005747 NA	22
0.512852677	3.67	0.009532468 NA	22.5
0.474372677	3.41	0.011442953 NA	21
0.529264695	3.9	0.010684932 NA	22
0.542627837	3.02	0.0094375 NA	21
0.572805657	3.02	0.010237288 NA	21
0.597849719	3.55	0.012326389 NA	21
0.495184666	4.77	0.014767802 NA	22
0.447190304	6.16	0.019870968 NA	21
0.479217073	4.77	0.014154303 NA	21
0.538758736	6.95	0.017866324 NA	21
0.480103121	6.53	0.016203474 NA	22

0.411814019	9.77	0.023656174 NA	23
0.41375657	7.23	0.018120301 NA	22.5
0.472214389	7.22	0.017960199 NA	22
0.468162624	6.89	0.017012346 NA	21
0.491292878	3.44	0.009690141 NA	22.5
0.52471368	3.82	0.010611111 NA	22.5
0.622621378	4.41	0.012708934 NA	19.5
0.529001463	19.19	0.049205128 NA	20.5
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0.435185649	10.08	0.024950495 NA	23
0.439618338	9.43	0.025349462 NA	22
0.421424436	9.18	0.022120482 NA	23
0.402712338	5.96	0.017275362 NA	23
0.480066737	5.5	0.015449438 NA	22
0.444363424	6.23	0.017851003 NA	18.5
0.412682758	5.52	0.013529412 NA	23
0.485135679	4.49	0.013052326 NA	22
0.487004187	4.88	0.013153639 NA	22.5
0.472985312	5.67	0.018231511 NA	20
0.479748353	3.73	0.01322695 NA	20.5
0.470687217	3.63	0.010371429 NA	23
0.491519293	4.07	0.013843537 NA	21
0.467619202	4.76	0.0136 NA	24
0.48805569	6.75	0.016503667 NA	23
0.472323041	5.08	0.013766938 NA	22
0.478620087	6.03	0.015826772 NA	22
0.448208404	4.54	0.015083056 NA	21
0.45656821	11.3	0.027560976 NA	23
0.48420791	4.77	0.013140496 NA	23.5
0.450697141	6.87	0.01940678 NA	22
0.495368184	4.93	0.012905759 NA	24
0.492691463	5.64	0.015452055 NA	23
0.45284552	6.2	0.015085158 NA	25
0.408073565	4.06	0.012155689 NA	21
0.496106805	3.6	0.010027855 NA	22
0.491804754	10.33	0.028774373 NA	22
0.373772201	6.83	0.016339713 NA	24
0.392606205	6.06	0.016031746 NA	23.5
0.51493882	6.38	0.018073654 NA	20
0.602247086	8.26	0.022754821 NA	19
0.658864331	6.15	0.016532258 NA	21
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0.443099716	5.08	0.014229692 NA	21
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0.62311453	3.97	0.011027778 NA	21.5

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0.524700313	3.63	0.0103125 NA	21
0.459250377	4.47	0.013504532 NA	19
0.420967425	5	0.012787724 NA	22
0.483195171	3.32	0.009247911 NA	20
0.519557883	5.24	0.014435262 NA	21
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0.497897165	3.84	0.010607735 NA	22
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0.475671857	3.88	0.011513353 NA	21.5
0.438712383	5.52	0.015637394 NA	23
0.496740427	8.17	0.0215 NA	22
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0.537668372	2.97	0.00980198 NA	22
0.463221044	3.46	0.010516717 NA	21.5
0.452660535	3.87	0.011517857 NA	22
0.468179329	4.76	0.014208955 NA	22
0.458303993	3.87	0.012018634 NA	20.5
0.486598148	4.73	0.014204204 NA	22
0.519557883	3.78	0.011216617 NA	22
0.476507649	3.47	0.011843003 NA	21
0.485650566	3.55	0.012199313 NA	20
0.539423203	2.69	0.009781818 NA	20
0.444662852	6.21	0.01940625 NA	21
0.508607903	3.36	0.012307692 NA	20.5
0.419104396	4.83	0.013721591 NA	22
0.469605226	6.43	0.015876543 NA	22
0.406193966	4.32	0.012895522 NA	22
0.493517229	3.12	0.009176471 NA	21
0.396262861	6.34	0.017513812 NA	22
0.419739278	4.71	0.012046036 NA	22
0.517798171	3.67	0.012440678 NA	19
0.49842697	3.38	0.011818182 NA	20.5
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0.485441673	4.2	0.012173913 NA	23
0.42291797	6.04	0.014731707 NA	23
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0.517118996	3.48	0.010205279 NA	22
0.409013894	7.23	0.019331551 NA	22
0.445260217	2.43	0.007763578 NA	22

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0.483653652	3.56	0.01133758 NA	19.5
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0.532921552	3.45	0.00982906 NA	22
0.453089681	4.19	0.012180233 NA	22
0.455641365	3.54	0.010473373 NA	20.5
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0.540233826	3.33	0.011326531 NA	20
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0.512469007	2.79	0.009362416 NA	20
0.745679662	5.9	0.019601329 NA	21.5
0.567376367	3.22	0.010488599 NA	21
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0.528753096	7.18	0.017684729 NA	22
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0.480647803	3.98	0.012880259 NA	20
0.532185447	4.16	0.011182796 NA	19
0.556873173	4	0.011142061 NA	21
0.458921277	3.89	0.011752266 NA	19
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0.504116903	2	0.005763689 NA	18
0.534901922	2.85	0.008878505 NA	19

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0.404485971	4.99	0.014463768 NA	20
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0.616048321	4.21	0.014467354 NA	17
0.54328027	5.7	0.017757009 NA	18.5
0.459170683	7.62	0.018676471 NA	21
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0.462402478	6.16	0.018610272 NA	19
0.467192529	6.47	0.017026316 NA	22.5
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0.479159921	4.53	0.015 NA	18
0.521582332	3.72	0.012739726 NA	18
0.449375738	5.85	0.015517241 NA	20
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0.465725478	2.81	0.00903537 NA	18
0.530046741	2.64	0.008073394 NA	18
0.465205303	6	0.017910448 NA	20
0.515448496	4.97	0.01496988 NA	18
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0.503011017	7.88	0.019949367 NA	19.5
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0.469888036	5.04	0.018394161 NA	18
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0.562748866	10.81	0.026174334 NA	22
0.507233156	5.35	0.014005236 NA	20
0.486873133	7.02	0.018921833 NA	20
0.562565179	6.63	0.017131783 NA	19
0.493265751	4.14	0.012545455 NA	20
0.480467993	4.87	0.015266458 NA	20
0.52471368	5.16	0.014870317 NA	20
0.492508552	6.82	0.017487179 NA	20.5
0.449741695	6.85	0.017125 NA	22
0.510354318	5.41	0.016646154 NA	20.5
0.54159657	3.35	0.009852941 NA	20
0.529440647	2.33	0.007373418 NA	18
0.517254372	4.82	0.012717678 NA	19.5
0.519707205	5.47	0.014281984 NA	21
0.54785237	4.06	0.012569659 NA	21
0.495613579	4.9	0.014540059 NA	20
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0.492642249	3.24	0.010485437 NA	19
0.446295273	3.09	0.010098039 NA	18

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0.491635674	5.45	0.01345679 NA	21
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0.501128844	4.53	0.01208 NA	19
0.51677886	3.53	0.012172414 NA	20
0.558620757	3.43	0.010058651 NA	19
0.589350083	3.84	0.012 NA	19.5
0.470842681	5.55	0.015994236 NA	19
0.49789083	3.68	0.010514286 NA	22
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0.537156781	4.23	0.01443686 NA	21
0.494574169	5.66	0.016501458 NA	19
0.455813779	5.63	0.017929936 NA	18
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0.539391361	5.76	0.017507599 NA	18
0.546368132	4.87	0.017709091 NA	18
0.515392881	3.31	0.010781759 NA	19
0.46342565	6.48	0.016963351 NA	21
0.612634251	1.18	0.003586626 NA	19
0.444164767	6.39	0.018101983 NA	22
0.463559373	8.15	0.022957746 NA	21
0.433512196	5.6	0.015686275 NA	20.5
0.444026134	6.23	0.018486647 NA	21
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0.515418035	3.27	0.009879154 NA	21
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0.486270082	8.11	0.022098093 NA	19
0.411381675	7.44	0.019125964 NA	21
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0.46299129	19.18	0.0548 NA	19
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0.564972612	3.42	0.011103896 NA	19
0.495358997	4.25	0.013157895 NA	19
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0.513385219	6.91	0.017763496 NA	21
0.629233763	4.24	0.013677419 NA	21
0.468956447	3.99	0.011910448 NA	21.5
0.447262948	5.11	0.014985337 NA	21
0.427388202	5.24	0.016323988 NA	21
0.521496606	6.58	0.020757098 NA	21
0.505631827	5.9	0.017002882 NA	20.5
0.524424547	7.79	0.020997305 NA	21
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0.485070911	7.24	0.021741742 NA	19
0.67863537	5.42	0.017261146 NA	22
0.514850684	7.2	0.021176471 NA	19
0.439092236	7.93	0.020978836 NA	21
0.465422777	8.3	0.021447028 NA	22
0.573406265	5.82	0.014441687 NA	22
0.50815379	3.68	0.0092 NA	23
0.69842262	2.78	0.009520548 NA	19
0.572020849	4.47	0.01266289 NA	21
0.387934143	4.14	0.0129375 NA	20
0.390626105	6.78	0.018176944 NA	23
0.489667694	4.19	0.014805654 NA	20.5
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0.497370021	4.29	0.01370607 NA	21
0.535433881	4.39	0.014731544 NA	21
0.44745961	7.06	0.020345821 NA	20.5
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0.536180172	4.01	0.011327684 NA	21
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0.590536598	2.99	0.008925373 NA	21
0.458334599	7.8	0.021195652 NA	19
0.488444904	6.26	0.018040346 NA	21
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0.462539913	8.22	0.024391691 NA	23
0.421576943	5.82	0.016440678 NA	22
0.447823721	5.27	0.015545723 NA	21
0.427946657	6.82	0.017397959 NA	22
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0.486561019	5.45	0.014769648 NA	21
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0.487752256	4.01	0.011138889 NA	21
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0.514665523	5.71	0.016361032 NA	21.5
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NA	3.43	0.0098 NA	19
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NA	4.32	0.013374613 NA	21
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NA	3.57	0.012101695 NA	18.5
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0.478639527	3.98	0.011536232 NA	22
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0.475402952	5.56	0.01625731 NA	21
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0.476222197	5.75	0.015582656 NA	21
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0.421469883	10.89	0.035704918 NA	22
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0.465016421	5.1	0.014088398 NA	22
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0.440843888	4.84	0.014666667 NA	22
0.42517372	3.9	0.012420382 NA	19
0.493439607	4.95	0.013636364 NA	22
0.575325634	3.09	0.009142012 NA	21
0.481980538	3.49	0.010356083 NA	22
0.493310418	6.26	0.016873315 NA	21
0.493960633	5.45	0.014533333 NA	20
0.517776348	6.98	0.019071038 NA	22
0.460214347	7.81	0.021456044 NA	21
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0.517744988	8.4	0.020895522 NA	22
0.546130819	3.16	0.013446809 NA	17
0.54159657	3.89	0.013892857 NA	19
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0.621728522	4.67	0.015671141 NA	19
0.491807672	6.79	0.018551913 NA	20
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0.47464526	5.61	0.014130982 NA	22
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0.456668766	5.27	0.013443878 NA	21
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1	10.71	0.027113924 NA	20
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0.44297994	5	0.016129032 NA	20
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0.451320666	5.51	0.017774194 NA	20
0.525167964	4.28	0.014965035 NA	20
0.562420781	5.24	0.017643098 NA	20
0.466343815	3.63	0.010461095 NA	23
0.473347752	4.37	0.011684492 NA	23
0.582692739	7.05	0.018170103 NA	20
0.516784247	3.22	0.00966967 NA	21.5
0.476596503	4.48	0.012691218 NA	21
0.457570169	2.86	0.010514706 NA	20
0.444878174	4.78	0.015078864 NA	21
0.505055445 NA	NA	NA	NA
0.593298947	10.1	0.027297297 NA	20
0.466918681	6.75	0.018960674 NA	22

0.390393391	6.69	0.017605263 NA		23
0.453249276	4.72	0.015838926 NA		22
0.457091398	5.16	0.017731959 NA		20
0.457677043	4.24	0.014133333 NA		20
0.44551099	4.33	0.015519713 NA		20
0.504316564	5.61	0.015540166 NA		21
0.46158255	7.85	0.024763407 NA		20
0.546725308	6.18	0.018558559 NA		20
0.432516532	5.6	0.016326531 NA		21
0.624027271	3.48	0.010875 NA		20
0.531504071	2.71	0.008770227 NA		20
0.585364973	2.73	0.008863636 NA		20
0.432404954	5.67	0.015160428 NA		21
0.544671374	4.76	0.013333333 NA		22
0.464184801	5.37	0.01508427 NA		23
0.460049002	5.11	0.014641834 NA		20
0.507041285	2.62	0.009390681 NA		17
0.583821721	4.2	0.013461538 NA		20
0.473752122	5.65	0.015738162 NA		20
0.551814089	4	0.013651877 NA		18
0.514681265	4	0.012012012 NA		22
0.507632717	3.3	0.0132	0.00348	18
0.506177228	6.47	0.017872928	0.003093923	20
0.436861775	6.2	0.018235294	0.003088235	20
0.455230927	7.09	0.017250608	0.003114355	18.5
0.53587408	4.73	0.014035608 NA		21
0.431793064	9.96	0.026702413	0.003404826	21
0.485228051	7.87	0.022357955	0.003494318	21
0.530587083	3.61	0.012320819	0.003754266	16
0.555334323	3.99	0.011910448	0.00358209	18
0.558878207	3.42	0.010788644	0.002902208	21
0.451585529	8.81	0.020206422	0.003004587	22
0.491859253	5.45	0.01472973	0.003702703	21
0.506516965	4.07	0.013003195	0.003386581	19
0.477174051	4.76	0.015207668	0.003322684	18.5
0.483778095	3.12	0.00909621	0.003265306	19.5
0.601660072	3.68	0.012145215	0.00349835	19
0.533745216	7.24	0.021741742	0.003363363	20
0.433509779	19.11	0.058085106	0.003039514	18
0.398339029	5.53	0.016409496	0.003323442	18
0.411600426	5.31	0.016288344	0.003435583	18
0.569702198	3.03	0.010631579	0.003684211	19
0.581436606	2.6	0.008496732	0.003496732	19
0.613742269	2.93	0.008643068	0.003362832	20.5
0.613803737	3.14	0.010608108	0.003952703	19
0.475610545	3.95	0.01295082	0.003213115	19

0.474681992	3.62	0.01120743	0.003405573	21
0.46839407	4.86	0.013690141	0.003380282	18
0.536737355	3.76	0.010162162	0.003972973	19
0.596581145	5.43	0.016404834	0.003564955	22
0.46238907	5.73	0.018603896	0.003376623	20
0.494379501	19.1	0.061022364	0.003322684	20
0.515363764	6.92	0.0197151	0.003390313	20
0.508240775	4.47	0.013147059	0.003676471	18
0.460014505	5.27	0.014090909	0.003475936	18
0.526468631	5.13	0.012573529	0.003455882	21
0.462843275	3.99	0.013617747	0.003174061	21
0.539249982	8.41	0.020512195	0.003073171	23
0.542005784	4.26	0.013107692	0.003107692	20
0.531953385	19.17	0.044894614	0.003208431	19
0.574971639	3.3	0.009565217	0.002898551	17
0.515016513	4.64	0.012146597	0.003376963	18
0.466474683	3.26	0.010584416	0.003376623	16
0.639094675	3.48	0.009182058	0.003324538	19
NA	4.71	0.012394737	0.003578947	18
0.514649785	3.88	0.010514905	0.003306233	19
0.519981447	3.74	0.009946809	0.003138298	19
0.651879389	6.22	0.016542553	0.00337766	20
0.460580448	4.95	0.014688427	0.003175074	20
NA	5.46	0.01365	0.0034	19
0.510705333	5.46	0.014145078	0.00357513	19
0.560283792	2.22	0.007956989	0.003512545	18
0.613581082	3.06	0.010166113	0.00372093	17
NA	4.58	0.012411924	0.003523035	16
0.489571377	4.38	0.012844575	0.003636364	17
0.479310249	5.69	0.017087087	0.003933934	18
NA	4.88	0.013333333	0.002814208	17
NA	5.78	0.014559194	0.003224181	18
NA	3	0.008645533	0.003400576	18
NA	3.88	0.010929577	0.003633803	20
0.455633303	3.48	0.010116279	0.00377907	17
0.481092627	2.98	0.009283489	0.003613707	17
NA	15.81	0.033424947	0.003128964	22
NA	9.1	0.021718377	0.003031026	22
0.551563788	6.48	0.01785124	0.003526171	18
0.64268815	2.5	0.008116883	0.003311688	18
0.438518092	4.41	0.01214876	0.003278237	20
0.455409707	6.8	0.019373219	0.003190883	20.5
NA	6.55	0.01601467	0.003154034	20
0.451202885	10.84	0.027794872	0.003794872	20
0.45890432	8.88	0.021449275	0.003574879	21
0.469314384	6.61	0.017349081	0.003228346	22

0.577335177	3.72	0.011376147	0.003425076	19
0.769806566	3.15	0.009813084	0.00305296	20
0.533439523	4.77	0.015239617	0.003003195	20
0.559984437	7.26	0.02092219	0.002997118	21
0.524095141	7.04	0.020405797	0.003101449	19
0.515268549	3.34	0.009201102	0.003195592	21
0.49171142	4.83	0.012290076	0.003333333	22
0.498290984	3.39	0.009854651	0.003255814	22
0.612824468	1.72	0.004942529	0.003218391	19
0.465172676	6.09	0.014745763	0.003220339	20
0.472889778	6.03	0.01675	0.003305556	20
0.441684965	8.77	0.022202532	0.003240506	19.5
0.573622795	4.37	0.013873016	0.003587302	18.5
0.517648259	3.92	0.009560976	0.003756098	20
0.523617424	4.54	0.01191601	0.003228346	20
0.566503581	7.65	0.01774942	0.003201856	22.5
0.47043849	10.3	0.024407583	0.003056872	23
0.43042271	4.17	0.012410714	0.003333333	23
0.382818174	6.77	0.019510086	0.003371758	19
0.47419687	6.58	0.016828645	0.003324808	20
0.549610134	3.82	0.011863354	0.003664596	19
0.56708694	3.12	0.00914956	0.003519062	21
0.51436441	4.52	0.013950617	0.003611111	21
0.463520397	2.97	0.00897281	0.003293051	21.5
0.421639243	5.3	0.015142857	0.003314286	17
0.507800812	4.67	0.012453333	0.00344	19
0.455652307	4.3	0.012181303	0.003002833	20
0.531134145	4.25	0.012212644	0.002816092	22
0.49715434	7.6	0.02324159	0.003180428	16.5
0.523260592	3.15	0.011886792	0.003924528	16
0.519847008	4.54	0.013799392	0.003768997	20
0.511412108	5.16	0.013298969	0.003273196	21
0.598714254	5.71	0.017044776	0.003522388	18
0.569590837	7.05	0.015666667	0.003955556	19
0.48667337	4.88	0.011815981	0.003438257	23
0.472152378	4.48	0.013575758	0.003424242	22
0.491123042	3.14	0.010536913	0.003691275	22
0.433767693	8.6	0.026791277	0.003333333	22.5
0.429845405	7.36	0.020909091	0.003267045	22
0.502431494	5.91	0.017909091	0.002757576	19
0.520367799	6.5	0.016883117	0.003324675	21
0.6348263	2.66	0.008608414	0.003527508	19
0.685145846	2.17	0.007890909	0.003709091	21
0.458151178	7.73	0.021294766	0.003085399	23
0.497233839	8.06	0.02137931	0.002811671	24
0.449510042	7.9	0.018287037	0.003425926	21

0.4769238	4.25	0.011580381	0.003242507	21
0.418667992	9.45	0.022079439	0.002429907	22.5
0.413040412	5.04	0.012695214	0.003274559	30
0.49588445	6.94	0.022605863	0.003127036	19
0.465499662	7	0.016826923	0.003677885	23
0.50715802	6.3	0.016622691	0.003403694	22
0.57949442	4.26	0.010215827	0.003213429	23
0.480624469	5.84	0.016638177	0.003333333	23
0.479257925	3.85	0.011127168	0.003728324	23
0.413825797	10.31	0.024201878	0.003051643	22
0.460823781	4.86	0.014594595	0.003573574	21
0.469218891	5.98	0.016162162	0.003324324	21
0.489083256	5.46	0.015	0.003049451	20
0.474388681	5.85	0.014735516	0.002997481	20.5
0.46676513	6.12	0.015979112	0.003394256	20
0.469701976	5.15	0.015014577	0.00361516	20
0.467295509	3.62	0.009234694	0.003647959	20
0.653690164	4.35	0.013942308	0.003205128	17
0.577929845	4.82	0.015157233	0.003333333	18
0.501797393	5.34	0.015433526	0.002919075	18
0.609296868	4.72	0.013074792	0.003185596	18
0.561527354	6.86	0.018950276	0.00281768	20
0.536504468	2.75	0.007947977	0.003468208	20
0.506451969	3.06	0.00953271	0.003021807	20
0.552067136	3.89	0.009700748	0.003216958	18
0.527700733	4.2	0.010421836	0.003151365	20
0.454964255	10.32	0.021544885	0.003068894	21
0.482795435	10.14	0.022633929	0.003080357	20
0.507436269	3.95	0.011686391	0.003343195	19
0.490358837	4.17	0.012990654	0.003239875	20
0.443815662	3	0.01	0.003133333	17
0.47374457	5.88	0.019405941	0.00330033	18
0.499951158	3.86	0.013835125	0.003512545	17
0.468535277	3.25	0.00890411	0.003315068	19
0.463267608	5.16	0.012647059	0.002843137	21
0.437836672	9.28	0.023734015	0.003401535	21
0.481493006	5.1	0.014782609	0.003188406	21
0.493104184	6.96	0.017709924	0.002926209	21
0.5128091	3.67	0.011540881	0.002861635	18
0.497346957	5.07	0.017128378	0.003141892	19
0.498911283	7.3	0.022121212	0.002636364	20
0.475881813	5.43	0.017516129	0.003225806	19
0.601478808	5.94	0.017731343	0.00280597	20
0.52035935	5.42	0.016832298	0.00363354	19
0.503704312	6.5	0.017759563	0.002978142	21
0.540187401	7.47	0.018959391	0.002715736	21

0.579821398	6.5	0.016795866	0.003359173	21
0.661572926	5.48	0.015013699	0.002958904	20
0.476975993	4.71	0.016241379	0.003655172	20
0.492304541	3.71	0.012576271	0.003254237	19
0.409854839	10.39	0.025096618	0.003405797	23
0.466966524	7.74	0.018832117	0.003041363	21
0.641123029	3.52	0.011318328	0.003311897	20
0.56304814	5.34	0.014833333	0.00325	20
0.533500573	7.02	0.018376963	0.003167539	20
0.483345652	10.44	0.022548596	0.003045356	24
0.520474899	6.06	0.016378378	0.003027027	21
0.514867778	4.85	0.016609589	0.003047945	19
0.463472358	6.62	0.019356725	0.002894737	21
0.530977019	1.85	0.006877323	0.0033829	20
0.545966606	7.02	0.017462687	0.002960199	21
0.586286776	6.07	0.015175	0.0032	22
0.527580693	4.76	0.013757225	0.003208092	21
0.529983401	9.08	0.02177458	0.003261391	23
0.538557065	4.37	0.014422442	0.003135314	20
0.526028263	5.73	0.016608696	0.00315942	20
NA	4.98	0.013387097	0.002903226	20
NA	6.72	0.018876404	0.003174157	21
NA	5.83	0.01777439	0.002957317	20
0.776679115	4.42	0.015347222	0.003402778	19
0.647509811	2.59	0.008381877	0.003495146	19
0.574530327	8.36	0.021218274	0.003071066	22
0.570260984	6.94	0.018408488	0.003448276	21
0.714346279	19.19	0.050633245	0.003113456	23
0.665831938	6.41	0.016563307	0.003462532	21
0.600492584	4.46	0.013433735	0.003975904	19
0.447087032	7.35	0.017093023	0.003255814	23
0.655540201	6.09	0.019967213	0.003442623	20
0.591455159	5.03	0.015867508	0.003154574	21
0.521636671	9.74	0.020723404	0.003382979	22
0.695622985	5.51	0.012873832	0.003761682	23
0.532854367	5.36	0.015098592	0.003183099	20.5
0.5597817	7.13	0.017914573	0.003517588	22
0.451836302	4.32	0.012781065	0.003461538	21
0.47698707	5.61	0.014685864	0.003324607	22
0.423680421	3.49	0.01090625	0.00325	21
0.445856477	2.79	0.00962069	0.003413793	21
0.490122659	8.1	0.022131148	0.003497268	20
0.489511951	15.31	0.030437376	0.003220676	24
0.458394051	4.06	0.012228916	0.003704819	19
0.508354484	6.69	0.017153846	0.003179487	21
0.477156599	4.41	0.013243243	0.003243243	21

0.584028394	5.48	0.016555891	0.003595166	20
0.448594426	5.31	0.014390244	0.003387534	22
0.476294234	4.18	0.011774648	0.003802817	21
0.541612901	4.37	0.013044776	0.00319403	22
0.633719361	3.4	0.010897436	0.002788462	20
0.565000867	3.33	0.013007813	0.003476563	20
0.642175654	1.73	0.007119342	0.003209877	19
0.540597161	7.8	0.019070905	0.003105134	20
0.496609536	11.69	0.025579869	0.002954048	21
0.551375001	14.9	0.032603939	0.002757112	21
0.596868223	7.22	0.01805	0.002925	22
0.442314589	9.61	0.023156627	0.002795181	23
0.512837294	7.77	0.018069767	0.002837209	21
0.477795619	3.95	0.011253561	0.003532764	20
0.496351541	3.48	0.010943396	0.003553459	20
0.500154332	4.51	0.01409375	0.00321875	19
0.493699662	5.2	0.014942529	0.003132184	19
0.456969609	4.03	0.01330033	0.00330033	20
0.498674071	3.65	0.012046205	0.00359736	20
0.469532754	8.1	0.023011364	0.003352273	19
0.614439704	2.62	0.007987805	0.003536585	19
0.53713266	4.16	0.013462783	0.003203883	20
0.574673726	3.54	0.011493506	0.003019481	19
0.550756634	3.92	0.011495601	0.003284457	20
0.439976556	8.43	0.023287293	0.003066298	21
0.502498786	6.09	0.016916667	0.003972222	21
0.495048341	5.71	0.015226667	0.00328	21
0.497024812	6.52	0.018212291	0.003156425	19
0.391145723	6.38	0.016111111	0.003030303	21
0.456074715	5.56	0.015444444	0.003194444	20
0.468466734	19.17	0.049792208	0.003194805	21
0.451410628	4.34	0.0135625	0.0031875	19
0.556374461	5.12	0.015329341	0.003473054	21
0.514130853	5.74	0.016882353	0.0035	20
0.493992693	5.14	0.014770115	0.003304598	19
0.460479893	5.98	0.016338798	0.003278689	20
0.444444416	3.12	0.010985915	0.003521127	19
0.481513254	2.9	0.009477124	0.003529412	20
0.462124647	6.81	0.017284264	0.003020305	20
0.45501214	5.9	0.016298343	0.002900552	19
0.558282994	4.9	0.013243243	0.003648649	22
0.490543166	4.13	0.011936416	0.002976879	22
0.531396141	2.99	0.01006734	0.003501684	19
0.544131695	6.08	0.016935933	0.003370474	20
0.418990046	8.66	0.021435644	0.002970297	22
0.457109067	5.55	0.016133721	0.003139535	21

0.403426146	6.21	0.017013699	0.003479452	20
0.59719871	6.02	0.017150997	0.003019943	20
0.537381089	5.66	0.01752322	0.003065015	20.5
0.578205547	4.77	0.013286908	0.002952646	22
0.579807638	8.02	0.019004739	0.002796209	22
0.451764165	5.57	0.016144928	0.00373913	20
0.419168095	5.89	0.017426036	0.004023669	19
NA	5.34	0.014432432	0.003108108	21
NA	4.51	0.012704225	0.003211268	20
NA	5.26	0.013878628	0.003271768	20
NA	6.14	0.016594595	0.002837838	22
NA	7.04	0.016603774	0.003113208	20.5
NA	9.86	0.021388286	0.003167028	23
NA	5.16	0.014333333	0.003361111	29
NA	5.09	0.013646113	0.00308311	23
0.437040111	5.22	0.016466877	0.003470032	20
0.463868089	2.99	0.009966667	0.0035	20
NA	5.66	0.015854342	0.003081232	21
NA	5.01	0.013801653	0.003057851	21
0.476169	4	0.014234875	NA	19
0.489742379	3.15	0.011580882	0.003419118	19
0.447220562	7.43	0.020812325	0.003277311	20
0.442235415	6.53	0.019319527	0.003461538	20.5
0.56531696	6.6	0.018131868	0.002857143	20
0.499803736	5.56	0.016449704	0.003076923	18.5
0.453930902	7.2	0.0192	0.002933333	20
0.465752332	11.12	0.026042155	0.002693208	22
0.530164048	4.81	0.015667752	0.003452769	19
0.437134613	12.47	0.030048193	0.003301205	20
NA	4.56	0.012773109	0.002941176	21
0.506861763	6.41	0.015483092	0.003188406	22
NA	5.08	0.014853801	0.003508772	22
NA	4.85	0.012796834	0.002955145	22
NA	3.84	0.012307692	0.003846154	20
NA	5.87	0.01599455	0.003269755	20
NA	4.38	0.014551495	0.003554817	20
NA	1.39	0.005537849	0.003984064	18
NA	5.55	0.015289256	0.003140496	21
NA	4.63	0.012861111	0.003305556	21
NA	5.86	0.0183125	0.00315625	19
NA	4.01	0.011169916	0.003342618	22
NA	2.14	0.006625387	0.004210526	20
NA	2.96	0.010724638	0.003949275	21
NA	9.05	0.021194379	0.00295082	23
NA	9.24	0.021741176	0.003223529	20
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NA	8.35	0.021032746	0.002972292	21
NA	6.88	0.02047619	0.003392857	21
NA	4.59	0.013993902	0.003109756	20
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NA	3.36	0.009081081	0.003324324	22
NA	6.84	0.019826087	0.003478261	20.5
NA	6.59	0.018668555	0.002974504	21
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0.419495576	10.46	0.027967914	0.00328877	21
0.395366797	6.02	0.016957746	0.003014085	21
0.408895348	8.36	0.024880952	0.003630952	20
0.421316033	6.4	0.018658892	0.003498542	20
0.450398802	5.87	0.016867816	0.003477011	19
0.406396962	5.94	0.014210526	0.003397129	21
NA	3.84	0.011360947	0.003284024	21
NA	4.65	0.012367021	0.003218085	21
NA	6.94	0.01855615	0.002967914	21
NA	3.71	0.011557632	0.003457944	19
NA	4.44	0.012944606	0.00361516	21
NA	4.05	0.012423313	0.003527607	20
NA	4.71	0.013380682	0.003579545	21
NA	3.69	0.011640379	0.003974763	20
NA	9.59	0.026273973	0.003123288	21
NA	5.87	0.018935484	0.003419355	19
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NA	5.74	0.014793814	0.004407216	21
NA	11.82	0.027235023	0.003041475	22
NA	8.98	0.02195599	0.002958435	22
NA	3.43	0.012206406	0.00341637	19
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NA	3.45	0.00982906	0.003589744	21
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0.605335881	3.05	0.010854093	0.003202847	23
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0.500673974	5.55	0.018256579	0.003552632	23
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0.478192151	4.5	0.013931889 NA	18
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0.501817407	7.21	0.021020408 NA	21
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43	0.006861702
41.5	0.006870027
41	0.007087629
42	0.005875576
39	0.005770171
36	0.006868327
37.5	0.006723549
40	0.006515957
40.5	0.007230769
41	0.006393443
39	0.006803797
41.5	0.006666667
40	0.006818182

41.5	0.005959885
42.5	0.005282486
40.5	0.007207977
41.5	0.00735363
40	0.00734375
40	0.006647059
39.5	0.005648649
39	0.006531792
38	0.007105263
36	0.007177419
39	0.006529412
38	0.007908497
38	0.006169591
38	0.00656535
39	0.007372881
38	0.006609687
46	0.00577551
45	0.005909091
41	0.007253731
36	0.007535714
37	0.006433333
43	0.006468843
40	0.00658363
42	0.006632911
41.5	0.006878613
41	0.006973684
42	0.007205882
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Supplement Table 3. Heritability (diagonal), genetic correlation (lower diagonal) and Within brackets are SE for heritabilities, and $-\log_{10}(P \text{ value})$ for genetic and phenotypic correlation Dashes (-) indicate missing data for phenotypic correlations, where traits were measured on differ

	BW	BWGain	BLTail	BLNoTail	QUICKI
BW	0.54 (0.04)	0.08 (1.98)	0.62 (118.68)	0.57 (99.89)	-0.26 (21.84)
BWGain	0.24 (1.31)	0.18 (0.04)	0.03 (0.59)	0.08 (2.17)	-0.05 (0.93)
BLTail	0.74 (58.98)	-0.01 (0.04)	0.38 (0.04)	0.73 (189.27)	-0.17 (8.23)
BLNoTail	0.88 (82.81)	-0.02 (0.05)	0.8 (53.17)	0.22 (0.04)	-0.22 (13.27)
QUICKI	-0.31 (3.56)	-0.01 (0.03)	-0.24 (1.65)	-0.36 (2.68)	0.32 (0.04)
Ins0	0.3 (3.22)	0.03 (0.09)	0.25 (1.7)	0.37 (2.73)	-0.84 (101.26)
InsAUC	0.47 (8.41)	0.06 (0.18)	0.29 (2.2)	0.57 (6.88)	-0.84 (101.26)
Gluc0	0.17 (1.4)	-0.07 (0.25)	0.03 (0.1)	0.06 (0.21)	-0.38 (4.51)
GluAUC	0.28 (3.29)	-0.04 (0.12)	-0.06 (0.27)	-0.03 (0.09)	-0.24 (1.88)
CHOL	0.36 (4.9)	0.11 (0.39)	0.32 (2.96)	0.38 (3.3)	-0.16 (0.93)
TRIG	0.2 (1.64)	-0.14 (0.54)	0.01 (0.02)	0.14 (0.55)	-0.45 (6.35)
WPIC	0.19 (1.16)	-0.09 (0.25)	0.08 (0.27)	0.21 (0.79)	-0.23 (1.19)
EpiFat	0.66 (50.99)	-0.03 (0.11)	0.45 (8.16)	0.67 (17.83)	-0.54 (12.8)
RetroFat	0.71 (66.11)	0.06 (0.21)	0.46 (8.5)	0.72 (21.04)	-0.42 (6.65)
Pancreas	0.18 (1.54)	0.05 (0.15)	0.47 (8.28)	0.45 (4.84)	0.08 (0.39)
Heart	0.73 (65.09)	0.15 (0.58)	0.52 (10.44)	0.44 (4.52)	-0.23 (1.64)
RigKid	0.9 (106.41)	0.44 (1.72)	0.55 (4.09)	0.64 (3.98)	-0.27 (1.01)
LftKid	0.81 (37.92)	0.42 (1.44)	0.49 (2.86)	0.49 (2.01)	-0.19 (0.56)
TotKid	0.85 (67.27)	0.4 (1.38)	0.52 (3.74)	0.56 (2.96)	-0.21 (0.72)
EpiFat/BW	0.4 (8.83)	-0.14 (0.63)	0.26 (2.49)	0.46 (5.74)	-0.51 (11.24)
RetroFat/BW	0.49 (14.27)	-0.04 (0.14)	0.28 (2.72)	0.52 (7.15)	-0.39 (5.56)
Pancreas/BW	-0.37 (6.06)	-0.07 (0.23)	0.11 (0.58)	0.02 (0.05)	0.26 (2.12)
Heart/BW	-0.18 (1.31)	-0.03 (0.09)	-0.16 (0.86)	-0.37 (2.95)	0.03 (0.11)
RigKid/BW	-0.33 (1.63)	0.1 (0.2)	0.09 (0.21)	-0.09 (0.17)	0.11 (0.29)
LftKid/BW	-0.43 (2.62)	0.06 (0.1)	-0.01 (0.02)	-0.29 (0.83)	0.19 (0.64)
TotKid/BW	-0.36 (2.31)	0.03 (0.06)	0.04 (0.11)	-0.18 (0.47)	0.16 (0.57)

d phenotypic (upper diagonal) correlations between physiological traits.

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rent animals.

Ins0	InsAUC	Gluc0	GluAUC	CHOL	TRIG
0.24 (19.61)	0.33 (35.07)	0.16 (8.93)	0.21 (15.71)	0.25 (16.66)	0.17 (8.23)
0.05 (0.96)	0.03 (0.56)	0.03 (0.53)	0.01 (0.13)	0.05 (0.89)	0.02 (0.27)
0.17 (8.08)	0.2 (10.27)	0.05 (1.1)	0.03 (0.41)	0.12 (4.22)	0 (0.02)
0.22 (12.74)	0.27 (18.54)	0.07 (1.81)	0.08 (2.08)	0.15 (6.32)	0.06 (1.42)
-0.99 (Inf)	-0.71 (209.94)	-0.36 (43.51)	-0.16 (8.52)	-0.22 (12.56)	-0.32 (26.76)
0.31 (0.04)	0.72 (220.96)	0.22 (15.98)	0.1 (3.45)	0.19 (9.8)	0.29 (22.58)
0.85 (111.54)	0.29 (0.04)	0.15 (7.72)	0.2 (13.53)	0.26 (18.05)	0.28 (20.02)
0.24 (1.73)	0.23 (1.54)	0.36 (0.04)	0.43 (68.84)	0.24 (15.09)	0.27 (19.5)
0.16 (0.89)	0.16 (0.92)	0.66 (23.84)	0.36 (0.04)	0.16 (6.83)	0.13 (5.15)
0.15 (0.79)	0.3 (2.47)	0.14 (0.81)	0.15 (0.88)	0.44 (0.04)	0.12 (4.23)
0.41 (4.91)	0.45 (5.31)	0.46 (7.03)	0.26 (2)	0.12 (0.65)	0.42 (0.04)
0.21 (1.02)	0.39 (2.94)	0.18 (0.92)	0.12 (0.47)	0.26 (1.55)	0.39 (3.26)
0.55 (12.55)	0.73 (34.18)	0.23 (2.1)	0.22 (1.91)	0.34 (4.65)	0.42 (7.04)
0.42 (6.59)	0.64 (22.06)	0.1 (0.59)	0.15 (1.05)	0.37 (5.68)	0.41 (6.65)
-0.09 (0.41)	0.1 (0.45)	0.01 (0.04)	-0.19 (1.38)	0.28 (2.74)	0.03 (0.12)
0.24 (1.66)	0.27 (2.03)	0.08 (0.38)	0.12 (0.68)	0.19 (1.27)	0.19 (1.21)
0.27 (0.99)	0.56 (4.18)	0.06 (0.15)	0.1 (0.28)	0.45 (2.15)	0.18 (0.5)
0.2 (0.58)	0.6 (4.63)	0.03 (0.08)	0.11 (0.32)	0.36 (1.35)	0.24 (0.73)
0.22 (0.74)	0.58 (4.65)	0.03 (0.08)	0.13 (0.42)	0.4 (1.77)	0.19 (0.57)
0.52 (10.86)	0.68 (26.81)	0.24 (2.44)	0.2 (1.66)	0.29 (3.49)	0.44 (8.15)
0.39 (5.48)	0.6 (17.57)	0.1 (0.54)	0.12 (0.78)	0.34 (4.59)	0.46 (8.79)
-0.27 (2.22)	-0.13 (0.7)	0 (0.01)	-0.26 (2.37)	0.11 (0.61)	-0.03 (0.11)
-0.04 (0.12)	-0.14 (0.66)	0.06 (0.25)	0 (0)	-0.12 (0.66)	0.09 (0.39)
-0.02 (0.05)	-0.01 (0.02)	-0.47 (3.68)	-0.21 (0.77)	0.05 (0.1)	-0.63 (4.93)
-0.1 (0.29)	0.05 (0.13)	-0.46 (3.67)	-0.16 (0.56)	-0.13 (0.33)	-0.47 (2.53)
-0.08 (0.22)	0.06 (0.16)	-0.48 (4.63)	-0.13 (0.48)	-0.06 (0.15)	-0.52 (3.8)

WPIC	EpiFat	RetroFat	Pancreas	Heart	RigKid
0.07 (1.61)	0.63 (127.26)	0.64 (129.63)	0.32 (27.21)	0.61 (99.33)	0.71 (58.78)
-0.02 (0.3)	0.07 (1.58)	0.1 (3.3)	0.09 (2.48)	0.07 (1.66)	-
0 (0.04)	0.36 (36.25)	0.33 (28.74)	0.35 (33.33)	0.43 (44.34)	-
0.04 (0.79)	0.41 (46.52)	0.41 (46.34)	0.27 (19.01)	0.36 (30.35)	-
-0.18 (7.97)	-0.41 (45.24)	-0.38 (39.45)	0.01 (0.13)	-0.21 (9.86)	-0.17 (0.42)
0.16 (6.44)	0.4 (43.66)	0.38 (38.04)	-0.01 (0.08)	0.2 (9.51)	0.17 (3.15)
0.19 (8.31)	0.47 (59.76)	0.48 (63.04)	0.1 (2.9)	0.23 (11.55)	0.2 (Inf)
0.13 (4.25)	0.19 (9.77)	0.15 (6.6)	0.03 (0.42)	0.07 (1.52)	0.05 (104.76)
0.12 (3.8)	0.19 (9.5)	0.15 (6.66)	-0.04 (0.79)	0.11 (3.4)	0.17 (208.14)
0.08 (1.84)	0.3 (24.86)	0.36 (35.68)	0.11 (3.68)	0.12 (3.61)	-
0.21 (10.4)	0.32 (27.57)	0.39 (40.77)	-0.01 (0.15)	0.1 (2.93)	-
0.31 (0.05)	0.19 (8.84)	0.22 (11.24)	-0.33 (25.86)	0.05 (0.94)	-
0.44 (5.57)	0.58 (0.04)	0.68 (157.02)	0.14 (5.54)	0.27 (16.77)	-
0.41 (4.86)	0.75 (93.71)	0.6 (0.04)	0.18 (8.6)	0.43 (43.49)	-
-0.51 (7.06)	0.02 (0.1)	0.25 (2.57)	0.48 (0.04)	0.29 (19.09)	-
0.05 (0.16)	0.3 (3.59)	0.51 (12.27)	0.51 (9.89)	0.54 (0.04)	-
0.05 (0.1)	0.52 (4.4)	0.53 (4.57)	0.47 (2.94)	0.75 (13.41)	0.41 (0.06)
0.13 (0.27)	0.48 (3.49)	0.51 (4.24)	0.42 (2.24)	0.74 (11.6)	0.97 (Inf)
0.13 (0.29)	0.51 (4.42)	0.53 (5.29)	0.44 (2.65)	0.74 (13.63)	1 (Inf)
0.44 (5.95)	0.95 (Inf)	0.63 (37.41)	-0.07 (0.4)	0.06 (0.29)	0.27 (1.18)
0.43 (5.35)	0.67 (46.58)	0.96 (Inf)	0.22 (1.99)	0.33 (4.12)	0.32 (1.55)
-0.7 (21.88)	-0.31 (4.14)	-0.12 (0.81)	0.86 (273.76)	-0.15 (0.82)	-0.31 (1.06)
-0.1 (0.41)	-0.33 (3.73)	-0.15 (0.96)	0.03 (0.12)	0.58 (17.37)	0.1 (0.26)
-0.24 (0.63)	-0.1 (0.28)	-0.26 (0.98)	0.45 (2.75)	0.22 (0.85)	-0.17 (0.37)
-0.1 (0.2)	-0.15 (0.51)	-0.23 (0.83)	0.35 (1.76)	0.21 (0.8)	-0.18 (0.4)
-0.06 (0.14)	-0.12 (0.43)	-0.19 (0.73)	0.38 (2.35)	0.25 (1.17)	-0.15 (0.33)

LftKid	TotKid	EpiFat/BW	RetroFat/BW	Pancreas/BW	Heart/BW
0.67 (50.01)	0.73 (63.1)	0.36 (34.89)	0.39 (42.39)	-0.19 (10.35)	-0.2 (9.55)
-	-	-0.03 (0.47)	0.02 (0.4)	-0.04 (0.81)	-0.12 (3.76)
-	-	0.18 (9.44)	0.16 (6.95)	0.03 (0.43)	-0.11 (3.3)
-	-	0.25 (17.47)	0.27 (19.85)	-0.04 (0.64)	-0.12 (3.7)
-0.11 (0.13)	-0.14 (0.23)	-0.38 (39.38)	-0.36 (33.76)	0.16 (7.05)	0.01 (0.17)
0.11 (2.78)	0.13 (3.21)	0.38 (38.06)	0.35 (32.68)	-0.15 (6.46)	-0.01 (0.18)
0.15 (104.76)	0.18 (208.14)	0.42 (47.84)	0.44 (52.58)	-0.1 (2.95)	-0.08 (1.67)
0.02 (Inf)	0.03 (205.3)	0.18 (8.93)	0.14 (5.36)	-0.04 (0.78)	-0.02 (0.21)
0.16 (205.3)	0.18 (Inf)	0.16 (6.96)	0.12 (4.29)	-0.13 (5.19)	-0.01 (0.08)
-	-	0.27 (19.47)	0.34 (30.87)	-0.03 (0.49)	-0.12 (3.54)
-	-	0.31 (25.69)	0.4 (43.86)	-0.11 (3.47)	-0.02 (0.34)
-	-	0.21 (10.49)	0.24 (13.56)	-0.4 (38.91)	-0.02 (0.25)
-	-	0.94 (Inf)	0.58 (103.37)	-0.2 (10.57)	-0.27 (17.46)
-	-	0.55 (92.01)	0.95 (Inf)	-0.17 (8.17)	-0.12 (3.61)
-	-	0.02 (0.25)	0.09 (2.41)	0.85 (315.45)	-0.08 (1.85)
-	-	0.06 (1.36)	0.28 (17.75)	-0.08 (2.01)	0.63 (107.35)
0.85 (104.76)	0.96 (208.14)	-	-	-	-
0.38 (0.07)	0.96 (205.3)	-	-	-	-
0.99 (Inf)	0.43 (0.07)	-	-	-	-
0.25 (1.04)	0.27 (1.28)	0.6 (0.04)	0.54 (85.2)	-0.17 (7.98)	-0.24 (13.52)
0.34 (1.67)	0.36 (2.06)	0.62 (34.89)	0.58 (0.04)	-0.13 (5.04)	-0.06 (1.09)
-0.31 (1.01)	-0.32 (1.15)	-0.27 (3.28)	-0.03 (0.15)	0.51 (0.04)	0.07 (1.48)
0.17 (0.5)	0.14 (0.41)	-0.31 (3.49)	-0.1 (0.54)	0.26 (2.06)	0.43 (0.05)
-0.07 (0.12)	-0.12 (0.24)	-0.08 (0.23)	-0.31 (1.23)	0.55 (4.03)	0.29 (1.29)
-0.03 (0.05)	-0.09 (0.17)	-0.11 (0.33)	-0.22 (0.79)	0.5 (3.41)	0.36 (1.97)
-0.01 (0.02)	-0.02 (0.04)	-0.09 (0.3)	-0.18 (0.71)	0.51 (4.02)	0.39 (2.61)

RigKid/BW	LftKid/BW	TotKid/BW
-0.27 (7.16)	-0.26 (6.42)	-0.29 (8.15)
-	-	-
-	-	-
-	-	-
0.06 (2.06)	0.1 (2.15)	0.11 (2.86)
-0.04 (0.46)	-0.08 (0.46)	-0.09 (0.55)
-0.08 (13.99)	-0.11 (3.83)	-0.11 (8.42)
-0.14 (4.54)	-0.14 (20.66)	-0.17 (12.22)
-0.05 (8.82)	-0.05 (10.2)	-0.06 (11.1)
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
0.39 (13.99)	0.2 (3.83)	0.3 (8.42)
0.22 (4.54)	0.46 (20.66)	0.36 (12.22)
0.31 (8.82)	0.33 (10.2)	0.34 (11.1)
-	-	-
-	-	-
-	-	-
-	-	-
0.32 (0.09)	0.71 (57.41)	0.91 (146.94)
0.96 (165.38)	0.37 (0.09)	0.93 (157.47)
0.99 (Inf)	0.99 (Inf)	0.48 (0.09)

Supplement Table 4. All physiological QTLs (including fat pad weight traits not divided by sacBW) detected in this study. Each row shows one pQTL. The strain distribution pattern (SDP) at the peak SNP of the eight founder strains is shown in the last two columns. In terms of mapping method, pQTL detected by SNP-based are in light yellow background, HapMap-based pQTLs that replicated those reported in [10] or [11] are indicated by * and # respectively

Physiological QTL information								Genotype	
Phenotype	CHR	Peak marker	Start	End	Size	logP	Thresh	ACI	BN
RigKid	1	chr1_115083916	115.03	115.21	0.18	5.56	5.31	T	T
TRIG	1	chr1_281420356	280.62	282.13	1.5	6.61	5.36	G	G
	1	chr1_280326480	279.59	281.45	1.85	7.44	5.18	C	C
EpiFat	1	chr1_281420356	280.62	282.13	1.5	7.14	5.26	G	G
	1	chr1_281392429	280.02	282.27	2.24	6.69	6.03	T	A
EpiFat/BW	1	chr1_281420356	280.62	282.13	1.5	6.57	5.42	G	G
RetroFat *#	1	chr1_281420356	280.62	282.13	1.5	8	5.39	G	G
	1	chr1_281447925	278.94	282.66	3.72	6.64	5.39	G	C
RetroFat/BW *#	1	chr1_281420356	280.62	282.13	1.5	7.1	5.40	G	G
	1	chr1_281378861	278.94	282.69	3.75	5.43	5.35	G	G
RetroFat	2	chr2_92372860	92.35	92.52	0.18	6.24	5.39	T	T
RetroFat/BW	2	chr2_92372860	92.35	92.50	0.15	6.11	5.35	T	T
LftKid/BW	2	chr2_181254773	180.78	181.32	0.53	6.42	5.69	G	T
Pancreas/BW	3	chr3_45709398	44.95	45.83	0.88	6.07	5.34	G	C
RetroFat/BW #	3	chr3_95402825	92.3	98.31	6.01	5.65	5.40	G	G
TRIG	4	chr4_178497175	178.33	178.74	0.41	6.13	5.18	C	T
Heart/BW	5	chr5_98989187	98.99	99.18	0.19	10.99	5.65	G	G
	5	chr5_99088483	98.89	99.20	0.31	8.70	5.65	C	C
	5	chr5_168350441	148.47	170.12	21.65	7.94	5.65	T	C
	5	chr5_161602249	158.99	170.05	11.05	11.16	5.65	T	C
BW	6	chr6_3528327	3.48	3.72	0.24	5.68	5.39	A	A
CHOL	6	chr6_29652195	29.47	31.22	1.76	7.34	5.38	C	C
	6	chr6_29615083	29.45	31.59	2.13	7.11	5.69	G	G
TRIG	6	chr6_27196786	27.2	27.78	0.59	6.18	5.36	T	T
	6	chr6_27196786	23.03	28.37	5.34	6.24	5.18	T	T
RetroFat *#	6	chr6_29615083	23.12	31.24	8.12	10.05	5.39	G	G
	6	chr6_27196786	26.11	29.65	3.54	10.40	5.38	T	T
RetroFat/BW	6	chr6_29615083	23.12	31.24	8.12	10.48	5.40	G	G
	6	chr6_29615083	26.11	29.65	3.54	9.82	5.35	G	G
BWGain	7	chr7_42495997	40.02	44.07	4.05	5.36	5.32	T	C
BW	7	chr7_35933160	35.93	35.93	0	5.93	5.39	C	C
	7	chr7_35552320	35.51	36.20	0.69	7.72	5.39	T	C
CHOL	8	chr8_50803232	50.04	51.55	1.51	6.62	5.38	G	G
	8	chr8_50930198	50.04	51.55	1.51	6.25	5.69	C	C
TRIG	8	chr8_50033903	49.65	50.03	0.38	9.79	5.36	A	G

TRIG	8	chr8_50688095	50.00	51.55	1.55	9.58	5.18	C	C
BWGain	10	chr10_101864862	101.53	102.03	0.49	5.69	5.32	C	T
WPIC	10	chr10_100875066	100.69	102.52	1.83	6.08	5.14	T	T
EpiFat/BW	10	chr10_102451138	102.08	102.75	0.68	5.99	5.54	C	C
CHOL	12	chr12_36276781	34.48	36.91	2.43	5.47	5.38	C	C
BLTail #	12	chr12_4632329	0.7	6.49	5.79	5.42	5.36	T	G
RetroFat/BW	13	chr13_39553662	37.74	43.71	5.97	5.79	5.35	G	T
BLTail	14	chr14_19969820	19.94	24.13	4.19	7.09	5.36	C	G
	14	chr14_19729382	19.06	20.02	0.96	6.18	4.95	A	A
RetroFat	16	chr16_17476265	17.46	17.60	0.14	6.36	5.38	A	T
RetroFat/BW	16	chr16_17476265	10.18	17.78	7.61	5.45	5.35	A	T
BW	16	chr16_17470411	17.46	17.53	0.07	6.13	5.39	C	C
EpiFat	17	chr17_58601979	58.58	58.89	0.31	6.05	6.03	A	G
BW	19	chr19_52391237	51.87	54.4	2.53	7.67	5.39	A	A
	19	chr19_52379464	52.32	52.51	0.19	8.33	5.39	A	A
EpiFat	19	chr19_52391237	51.87	54.44	2.57	5.88	5.26	A	A
BLNoTail	19	chr19_52391237	51.87	54.44	2.57	6.14	5.40	A	A
TotKid/BW	20	chr20_5823811	5.81	6.28	0.47	5.29	5.09	G	G
EpiFat/BW	20	chr20_7957438	7.28	8.08	0.79	6.18	5.42	C	C
	20	chr20_5533215	5.41	7.67	2.26	6.28	5.54	A	A
WPIC	20	chr20_32707737	31.43	32.83	1.4	5.54	5.28	G	T
	20	chr20_32732941	32.56	32.74	0.18	5.59	5.14	G	G
EpiFat/BW	X	chrX_34392885	33.76	38.45	4.68	5.8	5.42	C	C
	X	chrX_35746165	34.87	35.82	0.96	7.23	5.54	C	C

ected in SNP-based and haplotype-based method

unders uses the following order: ACI-BN-BUF-F344-M520-MR-WN-WKY.

lotype-based are in white background

of the founders at the Peak Marker						
BUF	F344	M520	MR	WN	WKY	Replicated
C	C	C	T	C	C	
A	G	G	G	G	A	
C	C	C	T	C	C	
A	G	G	G	G	A	
T	T	T	A	A	T	
A	G	G	G	G	A	
A	G	G	G	G	A	* #
G	G	G	C	C	G	
A	G	G	G	G	A	* #
A	G	G	A	A	A	
T	T	T	T	T	C	
T	T	T	T	T	C	
T	T	T	T	T	G	
C	C	G	C	C	C	
G	G	A	G	A	G	#
T	T	T	C	C	C	
A	G	A	A	G	A	
A	C	A	A	C	A	
C	T	T	T	T	T	
C	T	C	C	C	C	
C	C	C	A	C	C	
C	C	T	C	C	T	
G	G	G	G	G	T	
C	T	T	T	T	C	
C	T	T	T	T	C	
G	G	G	G	G	T	* #
C	T	T	T	T	C	
G	G	G	G	G	T	
G	G	G	G	G	T	
C	C	T	C	C	T	
C	C	G	G	G	C	
T	T	C	C	T	T	
A	A	G	A	A	G	
T	T	T	T	T	C	
G	G	G	G	G	G	

G	G	C	G	G	G	
T	T	C	T	C	T	
A	T	T	T	T	A	
C	C	G	G	G	C	
A	A	C	C	C	C	
T	G	G	G	G	T	#
G	G	G	G	T	G	
G	C	C	C	G	C	
T	T	A	A	T	A	
A	A	A	A	A	T	
A	A	A	A	A	T	
T	T	C	T	T	C	
G	G	G	A	G	A	
A	G	G	G	A	A	
A	G	G	G	A	G	
A	G	G	G	A	A	
A	G	G	G	A	A	
C	C	C	C	C	C	
C	C	C	C	C	T	
C	A	C	A	A	A	
T	T	T	G	T	G	
G	G	G	C	G	C	
G	C	G	G	C	G	
C	T	C	T	C	C	

Supplementary Table 5. Genes mapped with cis-eQTLs in Liver

Ensembl gene name	Cis-eQTL information					
	CHR	Left bounda	right bound	interval (M	maximum log	minimum logP
ENSRNOG00000000024	4	168423565	169384424	0.960859	14.43424453	9.588783038
ENSRNOG00000000036	13	48892265	49496376	0.604111	6.721522039	5.057654067
ENSRNOG00000000040	13	72573892	73481897	0.908005	6.807618506	5.101079162
ENSRNOG00000000043	14	1063799	2823146	1.759347	11.99166679	7.154841947
ENSRNOG00000000053	13	90843274	91847033	1.003759	6.36785862	5.085818525
ENSRNOG00000000068	13	109121254	110922945	1.801691	7.635765091	5.251045841
ENSRNOG00000000073	14	1759392	2786574	1.027182	24.96572265	20.03649578
ENSRNOG00000000082	2	104832543	105821438	0.988895	18.49080655	13.70347287
ENSRNOG00000000170	3	114326559	115802792	1.476233	7.722097182	5.177923761
ENSRNOG00000000172	3	114070351	115505423	1.435072	47.33957384	43.29785561
ENSRNOG00000000175	7	12085496	14030837	1.945341	9.559205023	5.275439704
ENSRNOG00000000185	7	118855234	120199312	1.344078	10.51699456	6.547148185
ENSRNOG00000000187	7	118855234	119988364	1.13313	8.351953517	5.008271738
ENSRNOG00000000201	8	85599356	86175321	0.575965	20.48434926	16.16730008
ENSRNOG00000000245	10	96900194	98100536	1.200342	7.520149728	5.071554135
ENSRNOG00000000279	20	48884448	49359105	0.474657	58.20565807	53.54342096
ENSRNOG00000000308	20	45455911	46408439	0.952528	5.838345855	5.134306925
ENSRNOG00000000312	20	44976498	46420035	1.443537	15.01381611	10.07112787
ENSRNOG00000000395	20	31879674	32782869	0.903195	10.2320198	5.501436399
ENSRNOG00000000408	20	33352684	33573658	0.220974	5.830863652	5.570021409
ENSRNOG00000000431	20	3804493	5408848	1.604355	6.077005937	5.086231158
ENSRNOG00000000432	20	3980299	5129421	1.149122	5.30533065	5.054348391
ENSRNOG00000000433	20	3807984	5181359	1.373375	5.870681322	5.057393733
ENSRNOG00000000442	20	3804493	4625341	0.820848	15.72653537	10.80654974
ENSRNOG00000000454	20	3971783	4997904	1.026121	8.181551448	5.016223103
ENSRNOG00000000455	20	3797950	4582624	0.784674	11.20503991	6.205307785
ENSRNOG00000000456	20	3804737	4615133	0.810396	5.796717154	5.002252034
ENSRNOG00000000459	20	3968504	4212089	0.243585	5.417111007	5.072752245
ENSRNOG00000000470	20	4439260	5746246	1.306986	10.34862963	5.555361458
ENSRNOG00000000471	20	4557631	5593673	1.036042	16.0472078	11.0792732
ENSRNOG00000000473	20	4557631	5526405	0.968774	7.673760624	5.462283179
ENSRNOG00000000474	20	5429360	5526405	0.097045	6.488054214	5.285086654
ENSRNOG00000000477	20	4850859	5173589	0.32273	5.89252033	5.003924218
ENSRNOG00000000478	20	5408787	5533215	0.124428	21.21432702	17.38162142
ENSRNOG00000000490	20	6591892	7699089	1.107197	5.962824173	5.015051543
ENSRNOG00000000493	20	7284029	8075954	0.791925	35.94389696	31.85813673
ENSRNOG00000000500	20	7146804	8089117	0.942313	15.50731979	10.54279416
ENSRNOG00000000512	20	5982176	6917430	0.935254	22.04649873	20.54035475
ENSRNOG00000000524	20	5982176	7905162	1.922986	9.903240514	5.01392451
ENSRNOG00000000525	20	5982176	7905162	1.922986	7.826944509	5.049041785
ENSRNOG00000000531	20	8748482	9013886	0.265404	7.399346753	6.39210622
ENSRNOG00000000542	20	9393171	10169241	0.77607	7.90554324	5.041544718

ENSRNOG00000000543	20	40618125	41134959	0.516834	6.05035414	5.1132005
ENSRNOG00000000552	20	31022857	32535576	1.512719	8.32124697	5.113737563
ENSRNOG00000000561	20	30642068	31286058	0.64399	13.31687449	10.2287404
ENSRNOG00000000567	20	29351765	30459798	1.108033	11.11662713	6.711980176
ENSRNOG00000000568	20	29314568	30443277	1.128709	11.1963468	6.280964313
ENSRNOG00000000576	20	29137988	29701475	0.563487	14.20611699	9.306920322
ENSRNOG00000000582	20	48644937	48768166	0.123229	13.88794124	12.38438082
ENSRNOG00000000587	20	44749283	45673911	0.924628	5.661861289	5.045899708
ENSRNOG00000000595	20	43810824	45666444	1.85562	13.71907882	8.824835792
ENSRNOG00000000598	20	43810824	45226717	1.415893	11.25932248	6.276976526
ENSRNOG00000000605	20	40212454	40383638	0.171184	39.12175424	34.43815315
ENSRNOG00000000634	20	21323807	21619431	0.295624	6.003190963	5.256592191
ENSRNOG00000000641	20	22861019	23108485	0.247466	7.521551665	5.981814596
ENSRNOG00000000664	12	49394909	50661101	1.266192	8.299247582	5.282094179
ENSRNOG00000000704	12	48490735	48836342	0.345607	6.091065245	5.180938255
ENSRNOG00000000723	20	3892983	5751889	1.858906	20.61855774	15.99441298
ENSRNOG00000000728	20	231906	612969	0.381063	5.804352116	5.051005534
ENSRNOG00000000729	20	242135	1242990	1.000855	5.437625447	5.015302318
ENSRNOG00000000748	20	649245	1617953	0.968708	6.141641	5.028508067
ENSRNOG00000000768	20	1050706	2343752	1.293046	32.4662616	27.7503256
ENSRNOG00000000774	20	1050706	2565909	1.515203	8.037825195	5.023891657
ENSRNOG00000000787	20	3234049	3680501	0.446452	17.71826732	17.17682116
ENSRNOG00000000801	20	37298558	37727909	0.429351	15.82141492	11.73199685
ENSRNOG00000000802	20	37170420	38443732	1.273312	9.834078452	5.027782173
ENSRNOG00000000804	20	3234049	3680501	0.446452	26.02306987	21.12617491
ENSRNOG00000000811	20	40611690	41134959	0.523269	27.60502994	22.67229163
ENSRNOG00000000815	20	40816023	41353909	0.537886	8.106749044	5.35790677
ENSRNOG00000000826	20	3234049	3680501	0.446452	13.86686155	10.15262852
ENSRNOG00000000831	20	3123326	4557631	1.434305	8.765867585	5.166535996
ENSRNOG00000000847	20	4557631	5526405	0.968774	6.579758923	5.232760069
ENSRNOG00000000854	20	4170305	5489273	1.318968	7.643179197	5.212044079
ENSRNOG00000000891	12	5610656	5729619	0.118963	18.46100775	14.56225035
ENSRNOG00000000913	12	29462762	30951867	1.489105	21.84767387	17.49574138
ENSRNOG00000000920	12	30274895	31358068	1.083173	6.980012808	5.16419674
ENSRNOG00000000923	12	30478325	30684069	0.205744	33.98467355	29.16384969
ENSRNOG00000000925	12	30065218	31358068	1.29285	7.934487456	5.066477859
ENSRNOG00000000969	12	10258822	10922747	0.663925	20.64785133	16.07903351
ENSRNOG00000000978	12	10674778	11685660	1.010882	16.50265706	11.58124787
ENSRNOG00000000979	12	35981101	36906695	0.925594	8.386057656	5.259221932
ENSRNOG00000000981	12	36326753	36906695	0.579942	7.954531609	5.141681421
ENSRNOG00000000985	12	11150829	11764504	0.613675	15.76354415	10.94670403
ENSRNOG00000001005	12	1283462	3219807	1.936345	8.158822614	5.264407129
ENSRNOG00000001006	12	11148009	12081558	0.933549	16.79912192	11.92854202
ENSRNOG00000001033	15	57470220	58368398	0.898178	6.550355336	5.3241051
ENSRNOG00000001035	12	37067709	38442404	1.374695	8.308793929	5.459431673
ENSRNOG00000001050	12	12271806	12811000	0.539194	12.30324529	9.280862292

ENSRNOG00000001064	12	37402791	38374611	0.97182	7.382419969	5.121127374
ENSRNOG00000001079	12	12586581	13447941	0.86136	6.229175569	5.193847434
ENSRNOG00000001086	12	38082343	38377153	0.29481	5.517794759	5.046336986
ENSRNOG00000001113	12	13828545	14554896	0.726351	10.36569941	5.390873748
ENSRNOG00000001114	12	13951104	14553243	0.602139	13.27944625	8.335880317
ENSRNOG00000001115	12	13951104	14553243	0.602139	25.89578256	21.28945663
ENSRNOG00000001126	12	43076276	44955917	1.879641	9.743474267	5.01637068
ENSRNOG00000001130	12	43536359	44679798	1.143439	11.16877519	6.193199336
ENSRNOG00000001135	12	43992237	45140955	1.148718	7.107011591	5.009725405
ENSRNOG00000001159	20	9457507	9608362	0.150855	5.596491309	5.486117451
ENSRNOG00000001169	20	9457507	10137858	0.680351	7.112977689	5.109087549
ENSRNOG00000001171	12	46171348	47268304	1.096956	9.027115738	5.726677653
ENSRNOG00000001172	12	46292855	47268304	0.975449	13.59846575	8.900372387
ENSRNOG00000001173	12	46292855	47268304	0.975449	8.637331618	5.117192576
ENSRNOG00000001182	20	10111874	10346816	0.234942	23.53083617	20.18920816
ENSRNOG00000001201	20	10632349	11243225	0.610876	5.684389206	5.111369035
ENSRNOG00000001212	20	10377835	12270634	1.892799	8.573623256	5.185198637
ENSRNOG00000001214	20	11202530	11801153	0.598623	32.84449719	27.88928545
ENSRNOG00000001215	20	10502116	11856691	1.354575	7.598226743	5.042369557
ENSRNOG00000001216	20	11306358	11393459	0.087101	5.841938077	5.574404449
ENSRNOG00000001223	20	11447803	11785167	0.337364	25.4283719	20.46973106
ENSRNOG00000001232	20	12366683	13013192	0.646509	6.1595578	5.120855316
ENSRNOG00000001239	20	13780667	14559787	0.77912	10.69967507	5.955526095
ENSRNOG00000001242	20	12998972	14680661	1.681689	12.90177174	8.012321392
ENSRNOG00000001245	20	12368589	12579438	0.210849	6.354430137	5.432509266
ENSRNOG00000001247	12	37883957	38853909	0.969952	8.075294353	5.088453324
ENSRNOG00000001261	20	12801428	13295538	0.49411	6.131553291	5.127114022
ENSRNOG00000001273	12	16316835	17017524	0.700689	16.50035379	13.03090327
ENSRNOG00000001285	12	39084074	39459786	0.375712	5.516396266	5.444304285
ENSRNOG00000001300	12	38754036	40237661	1.483625	6.504728202	5.008161792
ENSRNOG00000001309	12	39337439	39797540	0.460101	5.902104066	5.567599335
ENSRNOG00000001339	12	38338399	39459786	1.121387	13.15507025	8.25992932
ENSRNOG00000001342	12	37907503	38879444	0.971941	14.93120427	10.13336554
ENSRNOG00000001344	12	39574079	41306347	1.732268	14.60622097	9.740097795
ENSRNOG00000001376	7	141223467	142229310	1.005843	9.7990457	5.067972752
ENSRNOG00000001383	12	41455421	41649622	0.194201	11.54141052	8.214250235
ENSRNOG00000001389	12	21205086	22100284	0.895198	5.866225596	5.494703122
ENSRNOG00000001404	12	21162028	22102480	0.940452	7.048099197	5.335689701
ENSRNOG00000001417	12	22308167	22843030	0.534863	15.11013816	12.28678583
ENSRNOG00000001426	12	22843563	24409567	1.566004	14.04117861	9.091852262
ENSRNOG00000001435	12	23101509	24541778	1.440269	7.621756247	5.260941428
ENSRNOG00000001436	12	23101509	24605991	1.504482	7.162185873	5.018014675
ENSRNOG00000001444	12	23579551	24409567	0.830016	6.322645469	5.386574801
ENSRNOG00000001453	12	24125353	24526122	0.400769	11.08816871	6.98285105
ENSRNOG00000001465	8	69069007	69083101	0.014094	7.414993936	7.090779837
ENSRNOG00000001466	1	257284922	259222533	1.937611	10.93341704	6.605909829

ENSRNOG00000001493	1	77621397	78938776	1.317379	6.953010572	5.428414875
ENSRNOG00000001531	14	114763326	115438145	0.674819	12.5968472	7.606194437
ENSRNOG00000001555	11	15907769	17835700	1.927931	12.56468688	7.596225432
ENSRNOG00000001557	11	16736451	17822172	1.085721	14.31238126	10.29652575
ENSRNOG00000001603	11	26211355	27168056	0.956701	16.93958819	12.08678423
ENSRNOG00000001628	11	37046077	37183491	0.137414	5.31144421	5.167592223
ENSRNOG00000001682	11	34533371	35733573	1.200202	19.73321751	15.43869259
ENSRNOG00000001686	11	33515514	35111313	1.595799	6.109696938	5.032561119
ENSRNOG00000001699	11	32824624	34718175	1.893551	7.360782866	5.258175524
ENSRNOG00000001706	11	69970657	70306964	0.336307	7.614523429	5.626326852
ENSRNOG00000001709	11	84389212	84710911	0.321699	5.300264674	5.080536635
ENSRNOG00000001711	11	74987946	75334110	0.346164	42.10055629	38.8186374
ENSRNOG00000001764	11	82344283	83615474	1.271191	21.31745779	16.33504333
ENSRNOG00000001806	11	80821646	81783970	0.962324	12.74149528	8.430574205
ENSRNOG00000001825	11	87962169	89958765	1.996596	8.870637275	5.040559162
ENSRNOG00000001827	11	79847963	80653599	0.805636	5.539709116	5.013445164
ENSRNOG00000001834	11	88903266	90137636	1.23437	5.700788318	5.111576527
ENSRNOG00000001842	4	181441240	181854227	0.412987	35.47462249	31.16394085
ENSRNOG00000001845	11	87428045	89286467	1.858422	20.52900898	15.55273775
ENSRNOG00000001864	11	87134418	88939077	1.804659	6.33885727	5.062884825
ENSRNOG00000001889	11	86441266	86974914	0.533648	28.86407371	24.60701539
ENSRNOG00000001890	11	86441266	86974914	0.533648	20.89536283	17.49975073
ENSRNOG00000001891	11	85619974	86986472	1.366498	9.206285644	5.320647254
ENSRNOG00000001915	11	16736451	17822172	1.085721	22.26644443	17.40302846
ENSRNOG00000001928	11	77284571	78035486	0.750915	8.180116239	5.059888277
ENSRNOG00000001930	11	75806980	77105183	1.298203	12.30306901	7.77651379
ENSRNOG00000001957	14	21102132	22996989	1.894857	25.92100688	21.3173381
ENSRNOG00000001958	11	52806412	54321677	1.515265	6.434202855	5.035247783
ENSRNOG00000001960	14	21102132	23098076	1.995944	8.660762804	5.351128582
ENSRNOG00000001963	11	37512091	38067305	0.555214	9.317173503	5.091285483
ENSRNOG00000001964	11	52528491	54416598	1.888107	19.25488979	14.25605348
ENSRNOG00000001967	14	22621181	23098076	0.476895	5.063587941	5.029544728
ENSRNOG00000001973	14	21221282	23403942	2.18266	13.72420658	8.840262547
ENSRNOG00000001980	14	23222742	23409588	0.186846	5.548883843	5.03859299
ENSRNOG00000002013	11	61346693	61557470	0.210777	7.354020713	6.019075317
ENSRNOG00000002061	14	7123155	7981361	0.858206	5.811749635	5.077529466
ENSRNOG00000002072	11	30140398	32072319	1.931921	8.544751792	5.023315555
ENSRNOG00000002079	14	7137976	8167227	1.029251	8.409781186	5.290408805
ENSRNOG00000002080	11	30140398	31953881	1.813483	13.11685996	8.473867071
ENSRNOG00000002085	14	32926161	34221661	1.2955	10.80250681	5.823769203
ENSRNOG00000002097	14	36157392	36751617	0.594225	8.565875873	5.470301419
ENSRNOG00000002121	14	5138636	6095109	0.956473	5.405040678	5.096560835
ENSRNOG00000002128	14	33316723	34264245	0.947522	7.699799562	5.055918904
ENSRNOG00000002137	14	33043033	34221661	1.178628	10.88462855	5.897004978
ENSRNOG00000002139	14	33376732	34208164	0.831432	8.018624757	5.129665685
ENSRNOG00000002141	11	60769925	60788736	0.018811	5.018959163	5.001205377

ENSRNOG00000002159	14	9573800	10527844	0.954044	16.03551072	11.12292252
ENSRNOG00000002176	11	56950777	58054103	1.103326	15.92699297	11.83190239
ENSRNOG00000002187	11	69130790	69692170	0.56138	6.787460739	5.005623716
ENSRNOG00000002192	14	45520538	46917835	1.397297	15.83860506	11.14947376
ENSRNOG00000002203	14	10558582	10982849	0.424267	10.67272975	5.990847604
ENSRNOG00000002215	11	68081196	69900082	1.818886	5.931301458	5.070843026
ENSRNOG00000002238	11	67333837	69343844	2.010007	8.806063216	5.07263915
ENSRNOG00000002241	11	68746629	68942529	0.1959	5.662148465	5.215107951
ENSRNOG00000002254	14	42555064	42992903	0.437839	7.625834877	5.084237245
ENSRNOG00000002352	13	68768418	69956274	1.187856	8.31038995	5.002606239
ENSRNOG00000002358	10	76361508	77163057	0.801549	24.31401844	19.3541629
ENSRNOG00000002396	13	26932898	28825392	1.892494	9.024782354	5.042429287
ENSRNOG00000002443	10	42665646	43226142	0.560496	6.518809346	5.539352215
ENSRNOG00000002471	11	65958987	67323205	1.364218	7.344011656	5.089207715
ENSRNOG00000002480	17	89947860	90843072	0.895212	11.8445478	6.87971077
ENSRNOG00000002488	10	42370574	43620241	1.249667	10.23289355	5.729061622
ENSRNOG00000002516	6	17831677	18602735	0.771058	13.81828798	10.14176971
ENSRNOG00000002569	13	77542893	78661331	1.118438	6.039441118	5.226269262
ENSRNOG00000002597	7	2582982	3314897	0.731915	21.10056734	17.14435861
ENSRNOG00000002609	17	89947860	90843072	0.895212	14.02854023	9.555022022
ENSRNOG00000002636	10	6108681	8153518	2.044837	11.43631511	6.452049839
ENSRNOG00000002653	13	106795542	108829243	2.033701	10.14862575	5.312961845
ENSRNOG00000002667	13	70474989	71598053	1.123064	8.035424931	5.104905885
ENSRNOG00000002671	10	81169318	82451648	1.28233	14.909867	10.59249242
ENSRNOG00000002693	10	81440278	82451648	1.01137	13.66360826	9.159109209
ENSRNOG00000002728	14	17701053	18705302	1.004249	8.829373267	5.002631636
ENSRNOG00000002764	10	60875549	62450988	1.575439	6.917070788	5.139448375
ENSRNOG00000002795	10	101996129	102683429	0.6873	5.908753393	5.146829516
ENSRNOG00000002810	10	34285217	35953168	1.667951	7.380117716	5.053682219
ENSRNOG00000002811	13	62529860	64944064	2.414204	6.599987138	5.094210437
ENSRNOG00000002812	10	71674099	71881448	0.207349	6.659547551	5.109177142
ENSRNOG00000002823	10	35355674	36366717	1.011043	7.515633261	5.039540949
ENSRNOG00000002840	7	2382091	3292510	0.910419	6.580865013	5.106295002
ENSRNOG00000002866	14	18781132	19957247	1.176115	6.618606332	5.154859284
ENSRNOG00000002878	14	18767504	20110202	1.342698	5.984448243	5.022448121
ENSRNOG00000002895	10	10046586	11299929	1.253343	9.787738883	5.002173835
ENSRNOG00000002907	13	49691989	51449015	1.757026	6.145771935	5.191756893
ENSRNOG00000002914	19	25355877	26104379	0.748502	6.472563232	5.366869102
ENSRNOG00000002922	10	47643923	49502367	1.858444	11.83607192	6.951663966
ENSRNOG00000002928	10	44598387	45980137	1.38175	10.4945221	5.49521638
ENSRNOG00000002934	13	82723657	83244772	0.521115	7.038899472	5.394187247
ENSRNOG00000002936	13	49691989	50530503	0.838514	37.38202441	33.16204606
ENSRNOG00000002947	13	82723657	84011585	1.287928	12.0652208	7.457269829
ENSRNOG00000002970	10	47643923	49454673	1.81075	6.093943964	5.072483892
ENSRNOG00000002977	10	47643923	49502367	1.858444	9.673031674	5.030003062
ENSRNOG00000002986	X	5749086	6450957	0.701871	10.70603036	6.621324428

ENSRNOG00000002997	10	13104889	14989692	1.884803	14.24142475	9.40702093
ENSRNOG00000003011	19	25090369	26104379	1.01401	20.00436405	15.04297857
ENSRNOG00000003018	13	88438290	89107426	0.669136	6.164440281	5.082687907
ENSRNOG00000003042	13	80231220	80640601	0.409381	13.21401939	8.951152926
ENSRNOG00000003070	10	48079073	49808311	1.729238	10.18738186	5.203457202
ENSRNOG00000003098	14	70961766	72476245	1.514479	10.57935504	5.663988718
ENSRNOG00000003108	10	90959045	91654981	0.695936	8.829619965	5.119383759
ENSRNOG00000003123	10	61202596	62436578	1.233982	6.773281476	5.065193613
ENSRNOG00000003147	10	34776587	36030294	1.253707	8.277772956	5.005726132
ENSRNOG00000003148	10	107052512	108298789	1.246277	7.728654988	5.238939289
ENSRNOG00000003198	10	2419359	3694784	1.275425	19.04134579	14.64569448
ENSRNOG00000003209	13	88546614	89633150	1.086536	18.61112434	13.61552737
ENSRNOG00000003214	10	48079073	49979830	1.900757	7.428034811	5.002434722
ENSRNOG00000003221	13	80168092	80607835	0.439743	5.858398479	5.012289428
ENSRNOG00000003223	13	99669705	101113812	1.444107	8.529940428	5.19521333
ENSRNOG00000003244	10	34763142	35964206	1.201064	7.28336633	5.133088341
ENSRNOG00000003259	10	107052512	107639537	0.587025	15.39293933	10.64759989
ENSRNOG00000003260	13	88622832	90113859	1.491027	9.407422859	5.030648123
ENSRNOG00000003261	X	9596808	11419114	1.822306	7.153079248	5.746269785
ENSRNOG00000003262	10	95009781	96536276	1.526495	9.392681199	5.404561999
ENSRNOG00000003264	10	103682531	104433643	0.751112	6.65077435	5.233961409
ENSRNOG00000003276	10	67120048	69060820	1.940772	8.498250685	5.118800206
ENSRNOG00000003289	14	69720074	70202691	0.482617	5.819722887	5.061256704
ENSRNOG00000003291	13	83059430	84936465	1.877035	23.48203284	19.63014056
ENSRNOG00000003300	13	49960524	50159711	0.199187	5.604946807	5.361635298
ENSRNOG00000003307	19	25090369	26104379	1.01401	8.667116822	5.123591077
ENSRNOG00000003367	10	53071698	54089766	1.018068	6.685515202	5.27157245
ENSRNOG00000003464	10	103307010	104419135	1.112125	8.228803191	5.044653565
ENSRNOG00000003480	13	91749322	92906758	1.157436	6.691589346	5.002233075
ENSRNOG00000003486	13	92039320	92432631	0.393311	11.45180687	7.404124166
ENSRNOG00000003491	10	95593117	97528908	1.935791	7.583114894	5.027145965
ENSRNOG00000003496	19	24160001	24419753	0.259752	5.386428777	5.08426016
ENSRNOG00000003509	13	92061379	92432667	0.371288	6.664814862	5.06051659
ENSRNOG00000003524	10	81977999	82867796	0.889797	18.25703475	14.5866552
ENSRNOG00000003536	10	35252544	35964206	0.711662	23.43042398	18.43245382
ENSRNOG00000003550	13	72573892	74113942	1.54005	6.069365236	5.033077624
ENSRNOG00000003562	13	100346859	101113812	0.766953	7.919947437	5.034444385
ENSRNOG00000003601	13	99311250	100381800	1.07055	11.18735682	6.209486713
ENSRNOG00000003611	X	13919821	15576044	1.656223	12.18401221	7.794265
ENSRNOG00000003649	13	72573892	74458136	1.884244	19.22496528	14.70564736
ENSRNOG00000003650	10	103694586	104419135	0.724549	7.147768543	5.114598651
ENSRNOG00000003683	10	53395997	54731992	1.335995	13.26982684	8.66615744
ENSRNOG00000003713	X	44317119	45778379	1.46126	11.20737489	6.604346495
ENSRNOG00000003717	13	99267757	100381800	1.114043	6.423660326	5.188208923
ENSRNOG00000003749	X	14125795	14951469	0.825674	6.203733399	5.219831081
ENSRNOG00000003759	6	121862445	122317195	0.45475	9.575497462	5.036975761

ENSRNOG00000003769	13	43167438	45310279	2.142841	17.93095507	13.48573929
ENSRNOG00000003782	X	42644532	44438893	1.794361	9.50636044	6.116825998
ENSRNOG00000003800	10	96556907	98213675	1.656768	8.993473271	5.041587662
ENSRNOG00000003822	10	28052810	29068558	1.015748	6.22994674	5.366927807
ENSRNOG00000003827	10	97247510	98098384	0.850874	8.123368544	5.432382829
ENSRNOG00000003841	13	110992505	111862491	0.869986	14.65536523	10.17151116
ENSRNOG00000003853	19	23826659	25090369	1.26371	11.82949897	6.879254704
ENSRNOG00000003855	10	10184638	11299929	1.115291	7.200182982	5.444181989
ENSRNOG00000003858	X	10241556	10365214	0.123658	6.175175503	5.406561058
ENSRNOG00000003861	13	81549310	82005062	0.455752	22.40725287	19.01372507
ENSRNOG00000003872	9	52194345	52932000	0.737655	5.952289205	5.097625414
ENSRNOG00000003884	13	43670849	45392609	1.72176	7.261417012	5.014064023
ENSRNOG00000003905	10	91719811	92372148	0.652337	7.831167201	5.028925431
ENSRNOG00000003931	10	97247510	98079626	0.832116	9.300004097	5.280937985
ENSRNOG00000003984	X	133964423	135793536	1.829113	7.475746273	5.301124029
ENSRNOG00000003999	6	28626975	28824228	0.197253	5.20312683	5.043374519
ENSRNOG00000004011	7	33199220	34122928	0.923708	16.99720357	12.00242642
ENSRNOG00000004032	10	103398831	104953936	1.555105	10.68578223	5.688418807
ENSRNOG00000004040	10	98302862	98331393	0.028531	40.83161002	36.88616106
ENSRNOG00000004085	8	131077346	132799553	1.722207	14.56963208	9.888343688
ENSRNOG00000004091	10	85448613	86518520	1.069907	9.943484839	6.32905295
ENSRNOG00000004139	10	55026913	56270290	1.243377	9.223968642	5.436174501
ENSRNOG00000004146	10	10951629	11324727	0.373098	21.71250313	16.9868124
ENSRNOG00000004147	10	98147501	98446159	0.298658	17.02344439	12.94506874
ENSRNOG00000004160	X	28259296	29369046	1.10975	12.32989544	7.966849937
ENSRNOG00000004165	6	71112576	71957794	0.845218	7.488893089	5.069970496
ENSRNOG00000004180	7	66340903	67075538	0.734635	12.83133807	12.35801795
ENSRNOG00000004200	7	82671860	84369785	1.697925	10.62409094	5.70626614
ENSRNOG00000004208	6	1604982	1691604	0.086622	5.392377675	5.057442266
ENSRNOG00000004263	13	109320316	111169283	1.848967	7.284406771	5.055458064
ENSRNOG00000004279	14	64742191	65603593	0.861402	5.325188509	5.04731356
ENSRNOG00000004280	14	84305610	84343425	0.037815	5.446067396	5.39694588
ENSRNOG00000004292	6	75290990	76363747	1.072757	9.547882524	5.594513945
ENSRNOG00000004298	7	77779569	79846107	2.066538	11.74676842	6.859401443
ENSRNOG00000004310	10	103398831	104934420	1.535589	7.674023211	5.288731724
ENSRNOG00000004314	7	67075538	67295237	0.219699	7.531237304	5.428990229
ENSRNOG00000004333	10	12312485	13371903	1.059418	6.637076062	5.305117767
ENSRNOG00000004337	13	73411047	74692344	1.281297	8.787166598	5.499124143
ENSRNOG00000004344	8	131712054	132913499	1.201445	16.33450367	11.62862761
ENSRNOG00000004391	7	70414839	71143748	0.728909	8.431190229	7.667420407
ENSRNOG00000004402	13	109399564	111356183	1.956619	8.148643706	5.055489122
ENSRNOG00000004421	7	63348555	64636169	1.287614	15.17713736	10.59550332
ENSRNOG00000004424	13	50648082	51995510	1.347428	6.313017484	5.199058766
ENSRNOG00000004438	7	133441101	134300362	0.859261	6.262813121	5.005644374
ENSRNOG00000004461	10	12233085	14094001	1.860916	8.213374451	5.052640868
ENSRNOG00000004484	7	117601513	119485565	1.884052	7.007312291	5.034233808

ENSRNOG00000004503	6	94824619	95196546	0.371927	5.149992417	5.100315257
ENSRNOG00000004532	3	3821980	5084638	1.262658	7.485654014	5.524670774
ENSRNOG00000004537	13	85874923	86504769	0.629846	10.85871028	6.030872342
ENSRNOG00000004554	7	38392800	39249312	0.856512	12.34131553	7.382677671
ENSRNOG00000004585	7	47201009	47409874	0.208865	5.045211366	5.018769321
ENSRNOG00000004595	7	142137266	142313902	0.176636	10.00319163	8.007616983
ENSRNOG00000004610	7	37825355	39050964	1.225609	11.91631755	7.417626599
ENSRNOG00000004621	14	113135692	115041664	1.905972	17.00341198	12.52033856
ENSRNOG00000004660	7	77141845	78887825	1.74598	6.798848134	5.072054138
ENSRNOG00000004668	10	55079049	56492284	1.413235	6.353855372	5.270205247
ENSRNOG00000004670	14	85958259	87309634	1.351375	9.910291334	5.381657688
ENSRNOG00000004672	14	83691902	84339990	0.648088	5.382914948	5.204367415
ENSRNOG00000004710	6	25350867	27026614	1.675747	23.37341092	18.62564715
ENSRNOG00000004725	7	142137266	142313902	0.176636	34.07026497	30.6243869
ENSRNOG00000004736	13	73481897	74622148	1.140251	24.52854724	20.876911
ENSRNOG00000004749	13	109694228	110914212	1.219984	8.018274204	5.030031844
ENSRNOG00000004756	13	51314323	52462042	1.147719	13.01023161	8.053453538
ENSRNOG00000004757	8	131817436	132913499	1.096063	5.636358365	5.007355654
ENSRNOG00000004766	10	10184882	11324727	1.139845	6.769758275	5.048930166
ENSRNOG00000004812	3	116163213	117149497	0.986284	12.45264328	7.478571286
ENSRNOG00000004834	10	103405237	104419135	1.013898	17.84053252	13.09962442
ENSRNOG00000004844	7	91387550	93197543	1.809993	12.7926144	8.488931831
ENSRNOG00000004926	3	99981509	100837657	0.856148	12.50379644	7.647646959
ENSRNOG00000004932	14	59147218	60272491	1.125273	11.30376233	6.419985387
ENSRNOG00000004941	6	25350867	27026614	1.675747	19.48809948	14.60277683
ENSRNOG00000004951	3	135699307	137835824	2.136517	10.73655936	5.770728356
ENSRNOG00000004998	14	78150301	78938281	0.78798	8.12739849	5.378112038
ENSRNOG00000005003	6	143718890	144708022	0.989132	17.4052877	14.0441425
ENSRNOG00000005015	10	56802932	58538223	1.735291	12.51234202	7.604248873
ENSRNOG00000005016	14	85394811	87329800	1.934989	13.46095642	8.767695806
ENSRNOG00000005031	3	5050223	5689465	0.639242	5.282328468	5.002811738
ENSRNOG00000005042	10	17735152	18949200	1.214048	16.18848118	12.04959397
ENSRNOG00000005061	6	108514967	109484680	0.969713	16.93685225	12.08730106
ENSRNOG00000005076	X	134685891	136091089	1.405198	12.37511369	7.704103306
ENSRNOG00000005094	14	71381290	71535780	0.15449	5.867591261	5.434973169
ENSRNOG00000005096	6	55567001	56644682	1.077681	5.965336981	5.279719023
ENSRNOG00000005108	14	78660182	78938281	0.278099	15.23955464	14.19406739
ENSRNOG00000005122	14	82720579	82826714	0.106135	5.259303719	5.137626027
ENSRNOG00000005123	7	81413955	83360695	1.94674	11.6024945	6.611619023
ENSRNOG00000005141	14	89048139	89838493	0.790354	8.574945631	5.066323312
ENSRNOG00000005176	X	37695747	39120355	1.424608	9.410855572	5.193943317
ENSRNOG00000005177	13	74735828	75997979	1.262151	13.76944615	9.577606294
ENSRNOG00000005193	10	55106434	56492284	1.38585	18.19160939	13.43915201
ENSRNOG00000005195	3	142509423	144181853	1.67243	6.881046082	5.018861817
ENSRNOG00000005228	7	29008480	29860151	0.851671	12.75231398	7.764311242
ENSRNOG00000005229	13	75183036	75608262	0.425226	5.333214671	5.12189043

ENSRNOG00000005266	7	34225782	35094300	0.868518	27.31251037	23.15877416
ENSRNOG00000005271	6	145402620	145790369	0.387749	5.872851981	5.177653338
ENSRNOG00000005279	6	1063340	1808786	0.745446	6.57009552	5.011656233
ENSRNOG00000005286	6	72210346	73297748	1.087402	21.07350702	17.96632753
ENSRNOG00000005302	14	76939576	77147229	0.207653	24.91279668	20.02418072
ENSRNOG00000005342	13	47209774	48412378	1.202604	5.86484633	5.071403997
ENSRNOG00000005348	3	92304930	92386925	0.081995	5.663287538	5.621660926
ENSRNOG00000005357	10	55106434	56492284	1.38585	21.07741716	16.62720331
ENSRNOG00000005367	3	117175406	117603374	0.427968	14.42668726	11.41374097
ENSRNOG00000005392	10	83014762	83439196	0.424434	13.69733914	9.976172055
ENSRNOG00000005428	14	81852627	83744806	1.892179	8.107923577	5.367439435
ENSRNOG00000005464	14	105979123	106034076	0.054953	5.668620106	5.089928713
ENSRNOG00000005478	4	87020762	88197107	1.176345	6.633458823	5.088841602
ENSRNOG00000005483	3	110717695	112046884	1.329189	6.906436945	5.218090963
ENSRNOG00000005492	6	42259189	43697424	1.438235	6.541176397	5.009198302
ENSRNOG00000005522	6	49793827	49898551	0.104724	20.73251068	16.7579309
ENSRNOG00000005569	10	83740049	84562159	0.82211	33.74965506	29.11308597
ENSRNOG00000005589	6	94535633	96432291	1.896658	11.19435813	6.32073792
ENSRNOG00000005610	6	21599285	22564028	0.964743	11.600599	6.60113302
ENSRNOG00000005614	7	118458262	120126008	1.667746	7.030195133	5.07600573
ENSRNOG00000005660	6	50455485	50734013	0.278528	5.271042766	5.23773263
ENSRNOG00000005668	3	14384398	16313120	1.928722	9.925716121	5.032864102
ENSRNOG00000005724	5	47114044	47170366	0.056322	12.11145343	9.176886627
ENSRNOG00000005731	8	6071615	6779308	0.707693	5.90229972	5.054777147
ENSRNOG00000005762	3	171541530	171643365	0.101835	5.357180649	5.123472264
ENSRNOG00000005840	3	4990909	5751749	0.76084	5.278298677	5.061927055
ENSRNOG00000005861	13	110931768	112591908	1.66014	18.65085298	14.14305077
ENSRNOG00000005868	3	51969382	53318124	1.348742	16.54527174	13.11332784
ENSRNOG00000005877	6	7167575	8151615	0.98404	7.763659511	5.258090646
ENSRNOG00000005888	3	109597462	111013696	1.416234	8.235762151	5.19904828
ENSRNOG00000005924	3	138101300	138585151	0.483851	48.63376317	44.01303918
ENSRNOG00000005930	8	52889405	53187898	0.298493	5.903987784	5.075969083
ENSRNOG00000005965	7	135441327	136495675	1.054348	17.96672335	13.42077162
ENSRNOG00000005975	7	73155248	73910122	0.754874	35.27276564	30.39166849
ENSRNOG00000005998	6	103823886	105813160	1.989274	9.362402239	5.102662597
ENSRNOG00000006027	3	109202925	111174664	1.971739	6.520250916	5.112090187
ENSRNOG00000006050	3	72150109	72527110	0.377001	5.112802692	5.105888408
ENSRNOG00000006076	4	25406914	25915483	0.508569	15.52435712	12.2835904
ENSRNOG00000006104	7	107640470	108646097	1.005627	9.710122944	5.489397735
ENSRNOG00000006114	4	25293430	26520131	1.226701	6.069259012	5.140876284
ENSRNOG00000006119	6	33146112	33312515	0.166403	16.71895741	14.24259477
ENSRNOG00000006131	10	92362367	94185503	1.823136	22.31533371	19.07333859
ENSRNOG00000006148	10	36785702	37235142	0.44944	6.12683704	5.363935945
ENSRNOG00000006197	4	56425722	57169619	0.743897	5.376927487	5.043535651
ENSRNOG00000006199	6	55692209	57142199	1.44999	9.735149467	5.568123666
ENSRNOG00000006204	6	25699066	27568916	1.86985	12.01810137	7.545783948

ENSRNOG00000006227	3	48038956	49595346	1.55639	8.661581511	5.12516777
ENSRNOG00000006326	6	25699066	27568916	1.86985	9.107051795	5.40074879
ENSRNOG00000006329	14	105032819	106281116	1.248297	6.06671391	5.007375749
ENSRNOG00000006341	15	4520318	4887149	0.366831	12.21501137	11.24360821
ENSRNOG00000006375	10	36794893	38395543	1.60065	9.49438255	5.199031832
ENSRNOG00000006403	8	47117876	49047823	1.929947	12.02633661	8.912017257
ENSRNOG00000006426	7	50325926	51244250	0.918324	6.809322243	5.186259154
ENSRNOG00000006467	6	108514967	109462322	0.947355	27.63398133	23.59064852
ENSRNOG00000006498	5	28176487	28847071	0.670584	7.284225804	5.117989619
ENSRNOG00000006508	4	99007482	99899700	0.892218	7.860957582	5.458533339
ENSRNOG00000006514	7	34247627	35827860	1.580233	8.468053897	5.171820111
ENSRNOG00000006526	4	14671735	15385580	0.713845	9.486801386	5.019016175
ENSRNOG00000006557	10	30644013	32403429	1.759416	10.76145353	6.582925433
ENSRNOG00000006593	14	78939701	79581600	0.641899	17.1670988	14.04352212
ENSRNOG00000006611	3	54442640	55523790	1.08115	11.40901059	6.545960726
ENSRNOG00000006697	5	27966667	28852277	0.88561	6.098003176	5.104847756
ENSRNOG00000006717	4	150108071	150822913	0.714842	6.668709687	5.129258175
ENSRNOG00000006726	4	150108071	150833054	0.724983	7.626257226	5.05681138
ENSRNOG00000006749	7	40053680	40409541	0.355861	5.445630505	5.188760994
ENSRNOG00000006779	4	21795563	23106249	1.310686	9.003747896	5.066536338
ENSRNOG00000006797	X	134568205	135872329	1.304124	6.361461331	5.179909096
ENSRNOG00000006804	5	8812900	8928372	0.115472	5.226521845	5.056564375
ENSRNOG00000006818	4	128895171	129649803	0.754632	7.475409949	5.074688541
ENSRNOG00000006844	7	2582982	3314897	0.731915	22.8377999	20.01914848
ENSRNOG00000006853	5	108696416	110621314	1.924898	20.55866387	15.57640688
ENSRNOG00000006855	5	159411834	159451207	0.039373	5.986577174	5.268473248
ENSRNOG00000006858	4	87876555	89388571	1.512016	6.314966509	5.037518688
ENSRNOG00000006871	X	135484904	136091089	0.606185	6.591521889	5.194230399
ENSRNOG00000006876	14	77969942	78093626	0.123684	5.478336007	5.301750445
ENSRNOG00000006894	3	9744381	10743487	0.999106	7.487444911	5.300672379
ENSRNOG00000006895	10	63294229	65232401	1.938172	9.312955524	5.511202915
ENSRNOG00000006898	15	4298851	4508284	0.209433	6.468267101	5.397247424
ENSRNOG00000006924	5	137285723	138213848	0.928125	19.12122099	14.36764489
ENSRNOG00000006926	5	32964569	34413575	1.449006	23.11543163	18.47817632
ENSRNOG00000006930	13	89835170	90751063	0.915893	8.359780529	5.958164794
ENSRNOG00000006986	6	75620062	76473437	0.853375	7.33886723	5.54272545
ENSRNOG00000007000	7	75358352	76526784	1.168432	9.280938305	5.001516567
ENSRNOG00000007023	6	2527714	3666153	1.138439	9.433447405	5.098016637
ENSRNOG00000007030	5	43509908	43662053	0.152145	7.447976395	5.005746486
ENSRNOG00000007032	7	137971690	139426628	1.454938	10.57868884	5.694231341
ENSRNOG00000007033	14	78939701	80812862	1.873161	9.395400401	5.052794644
ENSRNOG00000007041	4	88546542	89827836	1.281294	32.45996485	28.37123146
ENSRNOG00000007047	4	171473273	171802228	0.328955	9.186190069	6.893642206
ENSRNOG00000007054	10	57314039	57659090	0.345051	6.29103325	5.1942072
ENSRNOG00000007057	5	146014435	146665072	0.650637	5.848537955	5.469690006
ENSRNOG00000007069	5	8578650	10382263	1.803613	8.052588342	5.108149743

ENSRNOG00000007081	6	25123666	25259406	0.13574	21.25824998	17.84328067
ENSRNOG00000007118	4	112759126	113736957	0.977831	33.41871028	29.54326611
ENSRNOG00000007127	3	54891317	55820019	0.928702	11.18163807	6.580961934
ENSRNOG00000007139	5	33773947	35027740	1.253793	6.624926156	5.028948819
ENSRNOG00000007178	4	99007482	99580090	0.572608	24.88155701	21.11989618
ENSRNOG00000007221	3	117208681	118414846	1.206165	8.102620939	5.399940306
ENSRNOG00000007235	10	83904890	83961442	0.056552	17.26332542	14.82453401
ENSRNOG00000007247	4	161943665	162801790	0.858125	7.544131828	5.616532464
ENSRNOG00000007262	7	122765025	123738551	0.973526	9.137194263	5.537380038
ENSRNOG00000007272	4	98496232	100352521	1.856289	11.68808092	7.080636396
ENSRNOG00000007285	3	163203717	163518327	0.31461	22.15344159	17.53424001
ENSRNOG00000007304	4	88653386	90068496	1.41511	7.908747846	5.469883178
ENSRNOG00000007331	5	47560550	48244327	0.683777	8.087702257	5.453520458
ENSRNOG00000007332	7	118855234	119988364	1.13313	20.34194667	16.02879757
ENSRNOG00000007333	6	134792986	136141209	1.348223	6.64288421	5.212978128
ENSRNOG00000007351	5	33098086	34487803	1.389717	22.27098718	17.39239597
ENSRNOG00000007359	3	48703752	48964833	0.261081	6.445098781	5.771407248
ENSRNOG00000007371	X	135398378	135525665	0.127287	5.339232869	5.162620596
ENSRNOG00000007398	5	138160912	138240259	0.079347	5.397726442	5.245630566
ENSRNOG00000007407	7	34225782	36156599	1.930817	9.112758905	5.002128128
ENSRNOG00000007408	3	122126806	123116260	0.989454	35.25775058	31.18026892
ENSRNOG00000007445	5	22224310	22793881	0.569571	6.714223289	5.179403845
ENSRNOG00000007456	5	28827121	30464020	1.636899	7.799699968	5.321452124
ENSRNOG00000007457	3	71204451	73088596	1.884145	7.830324961	5.192978225
ENSRNOG00000007483	10	13544128	13613030	0.068902	5.342580884	5.342580884
ENSRNOG00000007509	7	14030837	14530342	0.499505	17.63957045	12.92808207
ENSRNOG00000007510	2	123066514	124419927	1.353413	12.90749579	8.299761676
ENSRNOG00000007548	3	137712792	139286820	1.574028	6.800074775	5.002486401
ENSRNOG00000007558	3	148085891	148807877	0.721986	5.902450731	5.005105896
ENSRNOG00000007561	8	27176010	28423734	1.247724	17.79063039	12.81756289
ENSRNOG00000007564	14	77969942	78938281	0.968339	8.751452011	5.363615443
ENSRNOG00000007574	5	159468953	160458810	0.989857	26.32110961	22.29676486
ENSRNOG00000007575	5	67911381	68561236	0.649855	10.10297749	5.593096795
ENSRNOG00000007584	3	110910673	111936227	1.025554	11.89952896	7.83003087
ENSRNOG00000007596	10	70072706	70439212	0.366506	5.899702407	5.430627531
ENSRNOG00000007639	5	123918079	125196826	1.278747	6.615230032	5.029636375
ENSRNOG00000007650	7	2512082	4132891	1.620809	8.648352845	5.155275065
ENSRNOG00000007660	6	99169545	99995408	0.825863	31.16974151	26.25961698
ENSRNOG00000007675	5	38358283	40346395	1.988112	13.10950336	8.216238234
ENSRNOG00000007679	7	120102226	120634534	0.532308	13.77960763	9.403083467
ENSRNOG00000007688	X	40072796	41399353	1.326557	16.89672045	12.68363949
ENSRNOG00000007710	3	9743481	10739426	0.995945	7.275211997	5.03127963
ENSRNOG00000007726	8	48337941	48788407	0.450466	8.439556404	7.11864927
ENSRNOG00000007733	X	64234291	64348509	0.114218	6.95965655	5.624805746
ENSRNOG00000007763	5	163921369	165141148	1.219779	7.41562617	5.13260958
ENSRNOG00000007806	4	54941483	55662770	0.721287	6.057451236	5.00967825

ENSRNOG00000007829	5	4537461	5925038	1.387577	13.44493479	10.04488162
ENSRNOG00000007850	6	134792986	136135046	1.34206	17.63798625	13.46179199
ENSRNOG00000007862	8	57213967	58918968	1.705001	14.89925971	9.98817313
ENSRNOG00000007865	8	109993521	110559346	0.565825	5.479739505	5.287667746
ENSRNOG00000007866	4	161569943	163349365	1.779422	11.16580605	6.225011327
ENSRNOG00000007869	10	58505615	59128390	0.622775	5.533726657	5.054083766
ENSRNOG00000007874	4	145984273	147260411	1.276138	9.879138324	5.468245902
ENSRNOG00000007886	5	78421594	79815908	1.394314	23.15504205	18.84198576
ENSRNOG00000007894	5	98422910	100128979	1.706069	6.660505954	5.290626515
ENSRNOG00000007900	4	56296154	57867624	1.57147	11.02136192	6.781676478
ENSRNOG00000007918	4	66720693	67794155	1.073462	6.590117846	5.05215575
ENSRNOG00000007942	4	55029171	56258196	1.229025	6.84543513	5.02780876
ENSRNOG00000007949	X	917818	2501704	1.583886	6.850627824	6.559801152
ENSRNOG00000007951	6	24240015	24996947	0.756932	5.222344502	5.031210318
ENSRNOG00000007979	3	55820019	56539292	0.719273	6.066761971	5.129975306
ENSRNOG00000008012	4	22118483	23234940	1.116457	6.864601132	5.51757112
ENSRNOG00000008016	7	24390659	25054824	0.664165	16.20301081	11.32053108
ENSRNOG00000008026	7	13121289	13619609	0.49832	5.736067059	5.642474927
ENSRNOG00000008038	7	123128617	123852970	0.724353	6.283664063	5.041768948
ENSRNOG00000008046	6	96225297	96384060	0.158763	5.698174406	5.134025052
ENSRNOG00000008064	7	123563330	123617335	0.054005	5.677292694	5.054446838
ENSRNOG00000008079	14	106084653	107197986	1.113333	7.251164545	5.023693339
ENSRNOG00000008090	5	127488883	129454984	1.966101	9.384407139	5.023001019
ENSRNOG00000008099	5	61851163	62831707	0.980544	19.09127156	14.14495244
ENSRNOG00000008102	3	1371813	2243045	0.871232	6.221607989	5.072507364
ENSRNOG00000008116	5	124701906	125196826	0.49492	38.89334679	35.00683946
ENSRNOG00000008167	15	18491551	18721203	0.229652	6.559779746	5.13931812
ENSRNOG00000008214	8	84738310	85390143	0.651833	13.6755399	9.234998194
ENSRNOG00000008232	5	49638705	50208589	0.569884	23.74065024	19.87165248
ENSRNOG00000008236	5	28622006	30580636	1.95863	12.45696023	7.467277504
ENSRNOG00000008245	3	162981113	164403097	1.421984	13.92447025	9.16599239
ENSRNOG00000008256	10	103688556	105643908	1.955352	7.670084365	5.624864293
ENSRNOG00000008274	4	123871862	123912731	0.040869	6.497381964	5.111827102
ENSRNOG00000008283	3	163089477	164403097	1.31362	7.298639624	5.359542403
ENSRNOG00000008292	6	96334645	96903216	0.568571	6.282883495	5.497973016
ENSRNOG00000008300	5	147362125	148049877	0.687752	10.38695249	5.803376007
ENSRNOG00000008305	8	46691682	47047645	0.355963	6.497207041	5.143037657
ENSRNOG00000008400	8	62458005	63618780	1.160775	14.83937453	9.968880405
ENSRNOG00000008405	10	94186490	94225430	0.03894	5.033228733	5.006397028
ENSRNOG00000008414	7	12698796	13270323	0.571527	5.635567403	5.222940105
ENSRNOG00000008421	14	44622733	44793598	0.170865	5.105119239	5.07008998
ENSRNOG00000008427	5	159412808	160592320	1.179512	18.64316423	14.09308809
ENSRNOG00000008443	4	168142187	169744539	1.602352	9.247972289	5.00781931
ENSRNOG00000008482	3	45827527	47317748	1.490221	5.652380077	5.15292984
ENSRNOG00000008519	8	102136465	102790561	0.654096	5.86832329	5.088829343
ENSRNOG00000008526	8	48584778	49566668	0.98189	5.851073997	5.081906599

ENSRNOG00000008560	5	138280246	138283464	0.003218	5.982950565	5.283936651
ENSRNOG00000008566	5	13799246	14867476	1.06823	7.379525511	5.05836154
ENSRNOG00000008586	7	25495122	26780253	1.285131	7.138012691	5.110795454
ENSRNOG00000008596	3	148474524	148497326	0.022802	48.20493711	44.44183295
ENSRNOG00000008680	8	62347595	63618780	1.271185	9.372897697	5.134901369
ENSRNOG00000008689	10	84562159	84873408	0.311249	7.690780467	5.297961167
ENSRNOG00000008693	5	147362125	148052425	0.6903	9.432388193	5.923089757
ENSRNOG00000008694	7	130315089	130466840	0.151751	51.0783898	46.69459943
ENSRNOG00000008716	14	85196317	85403300	0.206983	29.98708164	29.34646113
ENSRNOG00000008746	3	138046821	139057477	1.010656	6.754773905	5.04380177
ENSRNOG00000008758	3	82132281	82393631	0.26135	44.79315254	43.12353371
ENSRNOG00000008797	7	31446289	31998541	0.552252	20.35848315	16.06002234
ENSRNOG00000008798	10	64944974	65865043	0.920069	7.825128684	5.017685036
ENSRNOG00000008839	4	146357622	147774988	1.417366	12.14607432	7.511657018
ENSRNOG00000008842	5	133142337	134070712	0.928375	7.391690964	5.147841842
ENSRNOG00000008859	3	47460189	48503654	1.043465	6.420793395	5.261666172
ENSRNOG00000008868	3	67912295	68768477	0.856182	7.016431859	5.05640311
ENSRNOG00000008901	5	61230216	62781250	1.551034	7.629652436	5.121699739
ENSRNOG00000008922	5	61662210	61807870	0.14566	6.295346572	5.130639949
ENSRNOG00000008937	13	52489086	52797735	0.308649	7.514359126	5.455149117
ENSRNOG00000008944	3	82444575	82901516	0.456941	15.87003987	10.92155936
ENSRNOG00000008945	5	61278132	62436770	1.158638	14.43792681	9.485542302
ENSRNOG00000008966	5	4867242	6840398	1.973156	11.86244906	6.9412464
ENSRNOG00000008970	15	66634123	68638568	2.004445	7.505259536	5.013281806
ENSRNOG00000008984	8	90009675	90655025	0.64535	11.27428942	7.297151488
ENSRNOG00000008988	7	123128617	123738551	0.609934	5.865250188	5.211809079
ENSRNOG00000008996	6	25999105	28018520	2.019415	10.21130896	5.437139041
ENSRNOG00000009014	8	57454142	58347742	0.8936	26.39372858	22.15655654
ENSRNOG00000009019	4	122656970	123262143	0.605173	5.562348223	5.048566324
ENSRNOG00000009035	4	78449512	79709471	1.259959	8.569455029	5.025933423
ENSRNOG00000009039	6	46986207	48897926	1.911719	11.09704635	6.218493145
ENSRNOG00000009049	X	917818	2501704	1.583886	9.668223136	5.188543626
ENSRNOG00000009063	15	59145163	60125120	0.979957	6.590456588	5.111410707
ENSRNOG00000009069	10	65382870	66230188	0.847318	5.826806176	5.051745333
ENSRNOG00000009149	8	27564990	28423734	0.858744	23.48884618	19.9448775
ENSRNOG00000009152	3	92799059	94583032	1.783973	8.311437269	5.207673533
ENSRNOG00000009199	3	82525561	82901516	0.375955	16.08073721	11.24175124
ENSRNOG00000009221	5	126147544	127100823	0.953279	10.95519916	6.596360783
ENSRNOG00000009239	3	2238215	2437217	0.199002	6.578061952	5.09070061
ENSRNOG00000009273	5	76484329	76736643	0.252314	6.171138539	5.368723946
ENSRNOG00000009280	4	66720693	67791252	1.070559	23.22030739	18.46929344
ENSRNOG00000009290	3	67346663	67670856	0.324193	6.013368657	5.205642173
ENSRNOG00000009296	6	95925895	96983041	1.057146	7.365583452	5.101331004
ENSRNOG00000009325	5	154142382	154336953	0.194571	31.87967953	27.58181575
ENSRNOG00000009350	10	64984312	65788466	0.804154	25.56605103	22.21028013
ENSRNOG00000009358	5	28898499	30616474	1.717975	6.182407802	5.036453894

ENSRNOG00000009372	2	239767528	240761826	0.994298	23.99542188	18.99957356
ENSRNOG00000009378	8	68769618	69860607	1.090989	8.895568719	6.685507679
ENSRNOG00000009388	2	165756095	167224196	1.468101	6.960911291	5.005160663
ENSRNOG00000009411	4	84327790	85429362	1.101572	7.413792489	5.256531508
ENSRNOG00000009439	8	85599356	86232187	0.632831	19.35673052	14.47401576
ENSRNOG00000009448	6	107403899	107669466	0.265567	13.87006742	10.0232355
ENSRNOG00000009484	4	98934344	100738707	1.804363	8.124162676	5.064475041
ENSRNOG00000009538	2	178553026	179208320	0.655294	5.869918717	5.172134382
ENSRNOG00000009548	2	260526309	261728051	1.201742	5.168449982	5.022875062
ENSRNOG00000009564	4	84327790	85429362	1.101572	17.6412234	13.17191392
ENSRNOG00000009585	7	123128617	123738551	0.609934	7.25354103	5.911135736
ENSRNOG00000009592	7	123128617	124981010	1.852393	9.398421898	5.034047884
ENSRNOG00000009598	7	129392064	130466840	1.074776	7.060367502	5.10926613
ENSRNOG00000009613	8	90707103	91366411	0.659308	6.446256533	5.190154129
ENSRNOG00000009636	4	84490853	85546883	1.05603	36.20153653	32.31727477
ENSRNOG00000009643	10	85796688	87710650	1.913962	9.311927058	5.257716462
ENSRNOG00000009649	15	96655187	96784647	0.12946	24.47501646	19.77845036
ENSRNOG00000009683	5	19673113	20456913	0.7838	7.047284546	5.158530238
ENSRNOG00000009686	5	56550682	57830040	1.279358	6.416761345	5.060163802
ENSRNOG00000009708	5	168201387	169599288	1.397901	13.32922607	8.978680277
ENSRNOG00000009730	2	101729858	103609970	1.880112	11.74457966	6.817247426
ENSRNOG00000009734	4	61697587	62808384	1.110797	11.64285699	9.137441773
ENSRNOG00000009741	5	133622763	134056288	0.433525	28.59797144	25.46896604
ENSRNOG00000009742	4	151470811	152068746	0.597935	6.553995915	5.138551306
ENSRNOG00000009761	5	61237272	62310396	1.073124	6.167272713	5.414955701
ENSRNOG00000009778	5	126257948	127684290	1.426342	8.063526619	5.069104538
ENSRNOG00000009797	5	56541102	57830040	1.288938	32.22266996	27.32378382
ENSRNOG00000009822	2	182284643	183136203	0.85156	6.193193933	5.038575835
ENSRNOG00000009845	2	259140884	260871242	1.730358	13.10130836	8.551906855
ENSRNOG00000009855	6	127612590	128129224	0.516634	15.33754235	10.66568189
ENSRNOG00000009882	2	242256671	242661301	0.40463	6.147616444	5.115993285
ENSRNOG00000009884	7	120102226	120536931	0.434705	6.083751105	5.139186749
ENSRNOG00000009889	5	118254619	118770543	0.515924	6.807317958	5.014667533
ENSRNOG00000009893	X	917818	2037736	1.119918	16.13542404	15.32596146
ENSRNOG00000009928	8	91514682	91642239	0.127557	35.4568103	34.7545446
ENSRNOG00000009932	1	132944161	133663891	0.71973	6.308949854	5.194240177
ENSRNOG00000009934	4	145623468	145782121	0.158653	8.566243773	5.486063569
ENSRNOG00000009945	8	102632473	104188408	1.555935	12.51618161	7.618663305
ENSRNOG00000009954	1	280969065	282126100	1.157035	6.912745095	5.074519514
ENSRNOG00000009993	8	35372792	37267984	1.895192	10.01264919	5.08829693
ENSRNOG00000009994	8	54641803	56042278	1.400475	5.541685615	5.245549738
ENSRNOG00000010042	15	45265869	47095567	1.829698	9.793224796	5.260271356
ENSRNOG00000010045	4	156338431	157023977	0.685546	7.186925721	5.32147196
ENSRNOG00000010060	8	13584541	13651282	0.066741	22.86460556	18.36508586
ENSRNOG00000010064	15	103937448	104880541	0.943093	8.512119798	7.058742588
ENSRNOG00000010098	6	101133001	102279893	1.146892	5.759394729	5.379000951

ENSRNOG00000010104	3	148090016	148953757	0.863741	5.522416526	5.021843186
ENSRNOG00000010121	2	235938073	237077595	1.139522	6.707584956	5.078742704
ENSRNOG00000010134	6	107133280	108440592	1.307312	8.241192599	5.118393258
ENSRNOG00000010149	8	126292845	127342714	1.049869	27.87217245	22.87516323
ENSRNOG00000010164	3	7054335	7093197	0.038862	14.50140077	13.81116542
ENSRNOG00000010188	9	63181178	63839861	0.658683	15.91859955	11.23082553
ENSRNOG00000010204	13	52544944	52836955	0.292011	38.03912544	33.33664941
ENSRNOG00000010214	10	84333335	84966186	0.632851	24.32792141	20.02691291
ENSRNOG00000010218	6	135187419	136129483	0.942064	5.291354471	5.094619103
ENSRNOG00000010224	1	156823005	157943936	1.120931	6.4183501	6.339290051
ENSRNOG00000010240	8	91995646	92915171	0.919525	6.996368506	5.001215424
ENSRNOG00000010244	10	64984312	66230188	1.245876	22.00554486	19.5988914
ENSRNOG00000010252	8	64109846	64324753	0.214907	6.931776941	5.085386388
ENSRNOG00000010260	8	54363927	55986726	1.622799	9.326499422	5.289101797
ENSRNOG00000010268	2	153664531	154165913	0.501382	12.6310915	10.59773212
ENSRNOG00000010280	2	24756484	25173037	0.416553	25.63163684	21.04892384
ENSRNOG00000010284	4	99030301	100699166	1.668865	24.25671796	19.56251669
ENSRNOG00000010301	4	131817356	133020163	1.202807	6.873376332	5.130098888
ENSRNOG00000010325	2	264003129	264267517	0.264388	6.47293507	5.167212098
ENSRNOG00000010326	3	175569485	177336004	1.766519	10.40989706	6.141591928
ENSRNOG00000010330	6	135187419	136852972	1.665553	9.517269645	5.773632842
ENSRNOG00000010331	15	46245862	46482309	0.236447	18.70346573	14.0061311
ENSRNOG00000010337	10	64934091	66011381	1.07729	33.86905029	28.99380014
ENSRNOG00000010370	10	39457140	40710481	1.253341	10.16525858	5.434967819
ENSRNOG00000010412	5	61181685	61287723	0.106038	28.40340217	23.94061695
ENSRNOG00000010472	3	109880519	111780545	1.900026	23.46347785	18.52488805
ENSRNOG00000010497	5	60519449	61078554	0.559105	8.440160236	5.468819137
ENSRNOG00000010512	5	126157629	127226536	1.068907	7.285504107	5.133809366
ENSRNOG00000010538	3	148450735	148977061	0.526326	18.72984424	17.56734952
ENSRNOG00000010546	4	28959762	29445699	0.485937	9.460331757	5.23496555
ENSRNOG00000010549	7	123537762	124981010	1.443248	11.99104997	7.295124478
ENSRNOG00000010556	2	126773566	128164173	1.390607	7.30372666	5.021439504
ENSRNOG00000010558	16	1680327	2072628	0.392301	43.23033071	39.08249277
ENSRNOG00000010593	5	72711639	74405587	1.693948	10.66526677	5.933176373
ENSRNOG00000010595	3	63363717	63874902	0.511185	9.750516036	5.142050449
ENSRNOG00000010602	8	5214672	6913654	1.698982	7.534086694	5.11656245
ENSRNOG00000010624	2	23374392	24525497	1.151105	8.844268627	5.018479168
ENSRNOG00000010630	1	157641019	158723392	1.082373	17.59131422	12.61071914
ENSRNOG00000010650	6	101675463	102314229	0.638766	6.691676535	5.777912219
ENSRNOG00000010658	2	263877117	265215153	1.338036	8.065795546	5.090847353
ENSRNOG00000010664	1	141758952	143700543	1.941591	14.90532212	9.952849208
ENSRNOG00000010702	4	2307893	3287877	0.979984	10.11340848	5.162603887
ENSRNOG00000010716	4	99083975	100714954	1.630979	18.38196909	14.00107315
ENSRNOG00000010728	9	65707084	66760204	1.05312	7.954300361	5.142503004
ENSRNOG00000010731	16	39210175	39718088	0.507913	32.75880355	27.87018433
ENSRNOG00000010733	8	48105427	49596844	1.491417	9.056877164	5.104167053

ENSRNOG00000010743	8	54641803	55699044	1.057241	15.92579845	11.32342275
ENSRNOG00000010753	1	7630871	8982538	1.351667	11.00126329	6.063353657
ENSRNOG00000010800	6	26578425	28124816	1.546391	5.437986017	5.003211352
ENSRNOG00000010802	8	93587163	94720684	1.133521	15.77509853	11.11175269
ENSRNOG00000010821	7	120312478	120566651	0.254173	29.79189192	28.33084967
ENSRNOG00000010834	7	124623305	124755724	0.132419	45.17779899	43.73542695
ENSRNOG00000010838	X	917818	2037736	1.119918	5.300308242	5.104887949
ENSRNOG00000010873	5	154255650	154462997	0.207347	39.33326643	36.38401734
ENSRNOG00000010881	9	64751980	66187546	1.435566	10.33143223	5.424005907
ENSRNOG00000010935	15	56351122	58259243	1.908121	9.237935763	5.040342472
ENSRNOG00000010940	8	112463625	112939355	0.47573	6.235680556	5.261824436
ENSRNOG00000010941	2	232051324	232250457	0.199133	17.4348706	16.02444268
ENSRNOG00000010959	1	136945465	137437446	0.491981	30.35062033	26.26429205
ENSRNOG00000010963	3	93088481	94803123	1.714642	7.077849452	5.080579596
ENSRNOG00000010977	7	143676550	144022604	0.346054	6.880348678	5.807681726
ENSRNOG00000011007	10	104623198	105746788	1.12359	16.14344575	11.90452661
ENSRNOG00000011025	2	242742079	243532421	0.790342	6.930574363	5.515919514
ENSRNOG00000011027	8	112463625	112939355	0.47573	6.114148349	5.142680203
ENSRNOG00000011042	9	104553269	105790025	1.236756	17.40979193	12.45573688
ENSRNOG00000011052	4	85318834	85894687	0.575853	5.366661236	5.02929047
ENSRNOG00000011053	2	236553964	236796163	0.242199	32.76820568	30.23100066
ENSRNOG00000011057	2	118022588	119951112	1.928524	12.41454384	7.523357952
ENSRNOG00000011058	1	6828086	7743076	0.91499	9.770996313	5.062107755
ENSRNOG00000011135	2	248739739	249655308	0.915569	7.191818719	5.156707179
ENSRNOG00000011140	16	17470411	17599168	0.128757	24.33980215	23.77234671
ENSRNOG00000011142	19	38483046	39699780	1.216734	6.978814049	5.219128334
ENSRNOG00000011146	2	104849699	105222298	0.372599	5.659271385	5.387009454
ENSRNOG00000011150	2	22403318	24032205	1.628887	7.043255251	5.045800281
ENSRNOG00000011193	8	82146435	83309197	1.162762	6.515770668	5.15026661
ENSRNOG00000011195	3	63363717	63788721	0.425004	30.04336572	25.28112561
ENSRNOG00000011200	2	22301664	23369173	1.067509	6.129347254	5.02112256
ENSRNOG00000011201	8	122489538	123197486	0.707948	10.63880458	6.954268848
ENSRNOG00000011203	15	105564168	106571128	1.00696	13.96620211	10.09776939
ENSRNOG00000011214	7	120102226	120725758	0.623532	6.722661488	5.539782966
ENSRNOG00000011245	1	19333370	19961262	0.627892	10.31899447	5.450825417
ENSRNOG00000011250	4	84927320	86220042	1.292722	6.495244674	5.013149971
ENSRNOG00000011276	16	3505091	4801630	1.296539	6.858663475	5.069676312
ENSRNOG00000011287	1	250676158	252059901	1.383743	12.85220761	8.065956747
ENSRNOG00000011293	16	32340040	33478396	1.138356	12.78262576	8.100508352
ENSRNOG00000011316	15	45992305	46301965	0.30966	6.81286276	5.724139386
ENSRNOG00000011348	8	95978197	96524641	0.546444	6.072169413	5.174530967
ENSRNOG00000011357	10	55573072	56492284	0.919212	27.92108198	24.46605303
ENSRNOG00000011367	1	183644875	185066447	1.421572	6.905586541	5.351702072
ENSRNOG00000011381	8	59187452	60085561	0.898109	5.772073353	5.262684772
ENSRNOG00000011413	5	127360387	128691126	1.330739	14.19761612	9.8587865
ENSRNOG00000011419	6	108192748	108475440	0.282692	7.644499214	5.251958098

ENSRNOG00000011422	19	49390798	50098442	0.707644	5.775332928	5.407388351
ENSRNOG00000011445	5	149154292	149286879	0.132587	5.519912691	5.423217006
ENSRNOG00000011446	8	127608484	128052889	0.444405	7.746364353	5.068177823
ENSRNOG00000011478	8	112518308	113016855	0.498547	20.10619722	15.2380499
ENSRNOG00000011559	2	224554852	225267917	0.713065	16.28816813	11.37280052
ENSRNOG00000011584	1	90536128	92201733	1.665605	7.810232672	5.196576004
ENSRNOG00000011617	4	114914595	115921367	1.006772	8.194264987	5.057446692
ENSRNOG00000011618	19	31862310	32137901	0.275591	5.543560128	5.178420164
ENSRNOG00000011635	19	493932	999245	0.505313	19.24502719	14.35720561
ENSRNOG00000011646	15	32366565	33992205	1.62564	10.50441222	5.58815284
ENSRNOG00000011648	4	84800469	85546883	0.746414	21.26404017	16.73101805
ENSRNOG00000011652	3	118415392	120105052	1.68966	26.43417298	22.55025591
ENSRNOG00000011675	1	61589221	63182170	1.592949	9.795081685	5.383183201
ENSRNOG00000011690	3	110024430	111931790	1.90736	7.222475867	5.431927332
ENSRNOG00000011700	9	114446768	116435969	1.989201	10.94625249	5.972261817
ENSRNOG00000011720	1	19342549	20963124	1.620575	7.669771182	5.00824002
ENSRNOG00000011723	2	224625772	225759905	1.134133	23.82396927	19.9272211
ENSRNOG00000011758	3	63367569	64286395	0.918826	7.559906733	5.094329916
ENSRNOG00000011784	9	12796705	13546909	0.750204	13.20180477	8.282511546
ENSRNOG00000011794	5	154750027	155023257	0.27323	8.198733763	5.427913268
ENSRNOG00000011826	16	21297431	22985792	1.688361	27.16001368	22.19310727
ENSRNOG00000011841	9	73296604	74420844	1.12424	8.170680151	5.400795937
ENSRNOG00000011895	1	102833268	103032891	0.199623	5.818285999	5.098697535
ENSRNOG00000011907	10	87165782	87881851	0.716069	13.85753569	8.966689325
ENSRNOG00000011910	5	154336953	155023257	0.686304	7.222693039	6.074066496
ENSRNOG00000011913	2	104799584	105233050	0.433466	5.820181619	5.297684338
ENSRNOG00000011929	2	224575479	225519038	0.943559	5.787387521	5.001046887
ENSRNOG00000011932	1	126957663	127393775	0.436112	11.61964711	7.218677524
ENSRNOG00000011946	4	64365724	64611524	0.2458	11.05405496	6.064797263
ENSRNOG00000011953	15	28433031	29424669	0.991638	11.98628206	7.555442915
ENSRNOG00000011964	6	107509151	108566272	1.057121	7.513614782	5.449192521
ENSRNOG00000011984	17	8114670	9350790	1.23612	9.495228957	5.035969372
ENSRNOG00000011994	1	13359706	14027925	0.668219	9.061735291	6.094239732
ENSRNOG00000012016	18	3073779	4140861	1.067082	10.49017847	5.662677445
ENSRNOG00000012017	2	79299448	80694695	1.395247	7.475946495	5.484665474
ENSRNOG00000012027	19	49392177	50471462	1.079285	38.38141619	33.77409168
ENSRNOG00000012046	15	32366565	33992205	1.62564	9.87856331	5.491277137
ENSRNOG00000012067	1	228807126	229574469	0.767343	37.32004538	33.08600841
ENSRNOG00000012083	10	104721301	105746788	1.025487	13.72310255	9.890180126
ENSRNOG00000012084	1	273509370	274087831	0.578461	8.417328849	5.022028454
ENSRNOG00000012085	6	108495171	108823867	0.328696	19.10249521	14.19867171
ENSRNOG00000012121	10	64984312	66163250	1.178938	14.65042813	9.834452661
ENSRNOG00000012146	6	110556223	111384331	0.828108	8.156771984	5.204566482
ENSRNOG00000012148	2	79474598	80694695	1.220097	10.59707387	5.755355374
ENSRNOG00000012162	10	55350879	57163105	1.812226	10.6332127	5.73843197
ENSRNOG00000012183	2	1784746	3500789	1.716043	7.546878835	5.645735135

ENSRNOG00000012189	17	8455652	9364019	0.908367	6.46612805	5.1949445
ENSRNOG00000012247	4	119622905	120574413	0.951508	12.39823724	7.844608663
ENSRNOG00000012271	19	9535972	10163185	0.627213	11.41172956	6.709237552
ENSRNOG00000012290	3	110767248	111826293	1.059045	5.468632282	5.1371113
ENSRNOG00000012295	7	120102226	120725758	0.623532	11.06784088	7.658039143
ENSRNOG00000012315	5	160046758	160369114	0.322356	6.068296888	5.312305629
ENSRNOG00000012325	15	2042358	4349135	2.306777	6.97389313	5.063977957
ENSRNOG00000012360	1	102724805	103250257	0.525452	10.55914069	5.992316222
ENSRNOG00000012371	19	51704	1212128	1.160424	8.376108027	5.368592194
ENSRNOG00000012379	7	11768676	13470324	1.701648	7.038642479	5.0342425
ENSRNOG00000012387	1	228807126	230539835	1.732709	11.01446211	6.309666508
ENSRNOG00000012390	10	13620578	14197731	0.577153	6.668057957	5.26818903
ENSRNOG00000012409	5	60233873	61335616	1.101743	5.791710655	5.122918022
ENSRNOG00000012427	2	157651878	158603394	0.951516	7.48397205	5.322375741
ENSRNOG00000012436	2	243014699	244113868	1.099169	20.12744268	15.56411044
ENSRNOG00000012440	15	46544414	48486619	1.942205	18.81574352	14.80122927
ENSRNOG00000012447	19	9642810	10067901	0.425091	25.09943907	20.67955898
ENSRNOG00000012454	5	60200193	61078554	0.878361	7.783572938	5.006400328
ENSRNOG00000012472	4	176139804	177018142	0.878338	22.09617139	17.22823883
ENSRNOG00000012486	9	38366384	39311857	0.945473	37.73619124	32.8974185
ENSRNOG00000012494	1	161640889	163290200	1.649311	7.929896405	5.066523329
ENSRNOG00000012500	8	56912666	58356390	1.443724	5.716440598	5.021792908
ENSRNOG00000012503	5	159527493	160750828	1.223335	15.52901445	11.07822365
ENSRNOG00000012546	5	60233873	61402482	1.168609	10.22451489	5.373524808
ENSRNOG00000012552	1	161502028	163396391	1.894363	12.41589843	7.536092933
ENSRNOG00000012568	3	80028136	80981148	0.953012	10.86026403	9.329661763
ENSRNOG00000012584	1	161623796	162596676	0.97288	7.919841947	5.004824273
ENSRNOG00000012629	9	38359645	39052930	0.693285	6.532583896	5.13285346
ENSRNOG00000012650	8	112859516	112929750	0.070234	5.280619979	5.140033639
ENSRNOG00000012659	4	99285575	100699166	1.413591	15.92447577	11.3298761
ENSRNOG00000012664	5	60593291	61023910	0.430619	22.29992986	18.65790121
ENSRNOG00000012679	9	14399653	14640459	0.240806	7.783290278	5.140180513
ENSRNOG00000012684	1	263697738	264185949	0.488211	47.08126429	42.0819104
ENSRNOG00000012721	19	32979163	34258550	1.279387	18.44217275	13.69271288
ENSRNOG00000012747	17	7404773	8204261	0.799488	6.204995917	5.221321396
ENSRNOG00000012760	2	189059177	190665089	1.605912	5.984802996	5.007698292
ENSRNOG00000012771	17	8728287	10377997	1.64971	7.650184987	5.216192429
ENSRNOG00000012772	19	38461620	39402455	0.940835	53.13438019	51.2559002
ENSRNOG00000012785	4	9782659	10971565	1.188906	6.280796632	5.046144483
ENSRNOG00000012787	X	113862318	114099007	0.236689	14.30846048	10.12265615
ENSRNOG00000012819	2	56865078	57811796	0.946718	15.80702437	10.94715906
ENSRNOG00000012853	19	493932	1212128	0.718196	11.4363658	6.46398617
ENSRNOG00000012860	19	33098122	34230285	1.132163	14.90652721	10.23296587
ENSRNOG00000012864	10	94910635	94914612	0.003977	5.436226217	5.173868598
ENSRNOG00000012876	4	153841921	153868025	0.026104	5.254698445	5.17607616
ENSRNOG00000012892	2	224650261	225898380	1.248119	5.603218823	5.013153895

ENSRNOG00000012928	19	33097027	34206687	1.10966	16.90433176	12.63617778
ENSRNOG00000012932	4	10021323	10949982	0.928659	5.282368877	5.224784567
ENSRNOG00000012937	19	39182937	40155323	0.972386	13.211003	8.940427036
ENSRNOG00000012956	3	154070146	154768127	0.697981	16.35686671	12.30599277
ENSRNOG00000012972	4	148496658	148650146	0.153488	5.912027048	5.045910204
ENSRNOG00000012975	4	99526990	101281836	1.754846	11.22426214	6.513545843
ENSRNOG00000012987	3	175764845	177336004	1.571159	12.64724476	9.324672709
ENSRNOG00000012989	5	148271277	149056616	0.785339	15.77186553	11.01931423
ENSRNOG00000012999	4	156389250	158187374	1.798124	10.80277399	5.856468328
ENSRNOG00000013000	4	176140716	177018142	0.877426	18.93974969	15.99733018
ENSRNOG00000013003	3	176097192	176718655	0.621463	7.514007977	5.867505968
ENSRNOG00000013004	4	64696705	64720763	0.024058	33.33863982	28.50234886
ENSRNOG00000013009	1	102724805	103240184	0.515379	7.377664761	6.071369538
ENSRNOG00000013011	2	257250547	258048759	0.798212	13.29652166	8.757136998
ENSRNOG00000013072	4	59093491	60405037	1.311546	6.684008906	5.141330506
ENSRNOG00000013135	4	10426108	11174336	0.748228	8.288661402	5.048260363
ENSRNOG00000013160	1	2787941	3380672	0.592731	6.131235925	5.11412525
ENSRNOG00000013169	10	64650040	66230188	1.580148	7.865157071	5.099630019
ENSRNOG00000013172	3	80028136	80981148	0.953012	8.301784163	7.130586591
ENSRNOG00000013201	8	114938225	115968726	1.030501	6.512808024	5.189236637
ENSRNOG00000013215	16	46588709	48207851	1.619142	10.61241196	5.700730895
ENSRNOG00000013229	8	96566117	96791110	0.224993	5.685249302	5.023030621
ENSRNOG00000013236	15	2298555	3665539	1.366984	5.242229895	5.00291048
ENSRNOG00000013238	9	26335088	28083053	1.747965	22.33922183	17.70829059
ENSRNOG00000013256	1	212620175	214313215	1.69304	11.56099477	6.644223184
ENSRNOG00000013257	9	59507480	61629047	2.121567	8.53069866	5.074498103
ENSRNOG00000013260	16	18801577	19395443	0.593866	33.11801747	30.98274346
ENSRNOG00000013269	2	112075619	113963396	1.887777	9.910428769	5.266335196
ENSRNOG00000013286	9	45577935	45814527	0.236592	6.658276292	5.895061227
ENSRNOG00000013291	1	263959934	264254017	0.294083	5.984268198	5.060942386
ENSRNOG00000013293	2	122259942	122433908	0.173966	5.610383894	5.286656206
ENSRNOG00000013309	1	260303471	261615619	1.312148	5.680583826	5.098030884
ENSRNOG00000013321	X	121770297	123430364	1.660067	20.69012947	16.28590987
ENSRNOG00000013353	15	24928082	26223022	1.29494	11.97125595	7.074823953
ENSRNOG00000013358	1	161809233	162888653	1.07942	14.70319251	10.44104445
ENSRNOG00000013379	4	147769912	149608564	1.838652	7.411514697	5.017613056
ENSRNOG00000013387	1	218412962	219183190	0.770228	11.12018632	6.937964465
ENSRNOG00000013419	8	59433124	60085116	0.651992	17.07754253	12.92966846
ENSRNOG00000013422	1	20774248	22115270	1.341022	11.06537358	6.090722878
ENSRNOG00000013428	4	65186999	66616686	1.429687	13.33189443	8.345063768
ENSRNOG00000013431	4	10287504	11312555	1.025051	7.428981142	5.074733382
ENSRNOG00000013439	1	263268427	264481779	1.213352	11.31069122	6.353282052
ENSRNOG00000013464	18	37435573	39136290	1.700717	8.171406797	5.10430947
ENSRNOG00000013469	17	25965150	27114126	1.148976	24.58834259	21.53994126
ENSRNOG00000013498	5	165188321	165563465	0.375144	6.889203774	5.649389603
ENSRNOG00000013515	5	149948684	150309824	0.36114	14.7584917	10.45703564

ENSRNOG00000013521	2	21717887	22825525	1.107638	46.07749561	41.90212176
ENSRNOG00000013548	1	77113285	77763410	0.650125	6.789376745	5.377916615
ENSRNOG00000013555	2	43535451	44178766	0.643315	5.524757872	5.051386816
ENSRNOG00000013557	9	73704254	74985722	1.281468	15.39382333	11.35910167
ENSRNOG00000013562	18	31991175	32588153	0.596978	6.114795575	5.228509161
ENSRNOG00000013583	9	45710984	45815125	0.104141	5.702603792	5.043811367
ENSRNOG00000013585	8	105697909	106461122	0.763213	13.14194434	8.449799586
ENSRNOG00000013589	4	150219631	150271307	0.051676	5.486946349	5.453952908
ENSRNOG00000013653	17	8728287	9962859	1.234572	19.57241601	15.07023237
ENSRNOG00000013669	8	113773417	114057391	0.283974	6.460102438	5.179550413
ENSRNOG00000013673	2	21677915	22830964	1.153049	6.71464681	5.006871746
ENSRNOG00000013719	2	218188517	218927623	0.739106	6.18408189	5.113290472
ENSRNOG00000013729	4	65186999	66389853	1.202854	27.60430435	22.80056675
ENSRNOG00000013738	18	51752175	51991851	0.239676	26.52993017	23.49067421
ENSRNOG00000013742	19	12528195	13336938	0.808743	5.524318148	5.048655408
ENSRNOG00000013748	9	14373632	15561121	1.187489	8.169411654	5.086572639
ENSRNOG00000013764	7	125338936	125954904	0.615968	5.666639756	5.08546636
ENSRNOG00000013771	2	250909260	251332862	0.423602	47.44542463	44.41634315
ENSRNOG00000013773	17	13157782	13482381	0.324599	8.439221446	5.067358092
ENSRNOG00000013774	18	51141455	52534569	1.393114	9.586353694	5.002200392
ENSRNOG00000013781	9	26687744	28083053	1.395309	7.197983215	5.049864848
ENSRNOG00000013794	8	105704426	106227295	0.522869	57.27490467	52.29749606
ENSRNOG00000013808	19	36842460	37822382	0.979922	21.27509464	16.52518494
ENSRNOG00000013825	5	155792998	156167493	0.374495	15.25502278	10.82733886
ENSRNOG00000013828	1	212628977	214565921	1.936944	16.64199701	12.2708042
ENSRNOG00000013867	18	32249628	33038648	0.78902	18.9444597	14.41551093
ENSRNOG00000013877	1	128678664	129386409	0.707745	21.99741315	19.47521863
ENSRNOG00000013925	1	150187865	151692105	1.50424	6.15159964	5.01550981
ENSRNOG00000013944	4	65186999	66571177	1.384178	7.036066786	5.569178735
ENSRNOG00000013954	5	155938109	156090189	0.15208	5.48743568	5.431122667
ENSRNOG00000013973	3	11469420	11864846	0.395426	41.25049592	38.6706169
ENSRNOG00000013977	9	64332042	65899075	1.567033	7.825662694	5.044357034
ENSRNOG00000013994	1	20776370	21662112	0.885742	20.70537729	16.18240909
ENSRNOG00000014027	10	58122590	59770583	1.647993	5.600282192	5.120317565
ENSRNOG00000014030	1	127955911	128803610	0.847699	18.58031857	13.66913662
ENSRNOG00000014059	2	250820742	251320315	0.499573	6.609310484	5.223262255
ENSRNOG00000014078	1	264260248	264293861	0.033613	26.61647155	24.54189267
ENSRNOG00000014087	19	10210023	11064608	0.854585	24.69004501	21.41728138
ENSRNOG00000014118	16	49411631	49811355	0.399724	10.08818746	5.176869668
ENSRNOG00000014130	17	13145583	13482381	0.336798	12.50432866	8.037201547
ENSRNOG00000014154	2	189059177	190486673	1.427496	6.61799057	5.035365883
ENSRNOG00000014162	9	41127892	41129895	0.002003	6.216196133	5.475862949
ENSRNOG00000014178	2	122007535	123046183	1.038648	45.72654347	40.89735967
ENSRNOG00000014190	1	29279312	29550987	0.271675	8.926147883	5.26902249
ENSRNOG00000014233	10	87925683	88120073	0.19439	5.373798409	5.038530408
ENSRNOG00000014235	3	176097192	177336004	1.238812	9.54377992	5.027819786

ENSRNOG00000014237	15	1899808	3132930	1.233122	26.2206044	21.88962618
ENSRNOG00000014251	1	162177270	163827942	1.650672	8.455215031	5.144337402
ENSRNOG00000014303	1	1521157	2370907	0.84975	9.892350594	5.072535061
ENSRNOG00000014357	5	144970744	145748975	0.778231	21.9889887	17.44998182
ENSRNOG00000014365	5	58628387	60049838	1.421451	17.14946309	12.26142609
ENSRNOG00000014426	18	46589137	47491782	0.902645	16.03167169	12.40779243
ENSRNOG00000014453	2	122486400	124045514	1.559114	51.96412381	47.1775657
ENSRNOG00000014461	19	54879170	55514934	0.635764	18.03497118	13.06992524
ENSRNOG00000014465	1	113722440	114174577	0.452137	22.00479476	17.50808474
ENSRNOG00000014504	9	46081061	47504180	1.423119	7.997942829	5.010904401
ENSRNOG00000014509	15	41199301	42468239	1.268938	9.32954817	5.086782188
ENSRNOG00000014513	1	189501943	190611871	1.109928	7.483241965	5.186049917
ENSRNOG00000014522	19	51869859	52339985	0.470126	7.783434371	5.492689657
ENSRNOG00000014530	1	104250872	105346434	1.095562	9.483034615	5.402382756
ENSRNOG00000014595	6	136805787	138151250	1.345463	8.355238029	5.016604627
ENSRNOG00000014604	5	57206443	58969295	1.762852	27.48958503	22.97690266
ENSRNOG00000014605	16	84843216	85552596	0.70938	19.31889858	15.37397972
ENSRNOG00000014610	1	140688757	142597612	1.908855	9.992557383	5.39171519
ENSRNOG00000014617	4	99641555	101392035	1.75048	18.79881426	13.87987718
ENSRNOG00000014623	10	94039829	96038501	1.998672	9.569808279	5.049051219
ENSRNOG00000014637	7	126123951	127005422	0.881471	13.07569662	8.16750218
ENSRNOG00000014642	5	172029599	172730494	0.700895	6.839752508	5.359752825
ENSRNOG00000014647	19	36734831	37996466	1.261635	6.490749561	5.112662041
ENSRNOG00000014652	1	193408234	194183986	0.775752	6.281029179	5.044331619
ENSRNOG00000014659	15	41307360	41927465	0.620105	16.32797697	11.44111063
ENSRNOG00000014668	19	36548427	37838079	1.289652	7.210527964	5.077739866
ENSRNOG00000014691	1	172725628	174093771	1.368143	6.085269242	5.151664696
ENSRNOG00000014702	17	21611387	21748084	0.136697	25.19103936	23.34310636
ENSRNOG00000014711	10	13764962	14770582	1.00562	26.44480791	21.46833832
ENSRNOG00000014712	10	44267829	45368908	1.101079	31.22730723	26.37487748
ENSRNOG00000014713	4	150108071	150558767	0.450696	6.030145942	5.16853343
ENSRNOG00000014719	8	30647371	31580692	0.933321	10.20439372	5.303101015
ENSRNOG00000014727	10	14109097	14418781	0.309684	40.54835615	38.87872588
ENSRNOG00000014739	3	160782322	161670592	0.88827	9.22784899	5.129065936
ENSRNOG00000014742	10	62638494	63214893	0.576399	9.072364605	5.323990628
ENSRNOG00000014743	10	14109097	14513227	0.40413	53.54562045	50.29579236
ENSRNOG00000014762	5	139944182	141803193	1.859011	9.298659701	5.11463175
ENSRNOG00000014766	5	57206443	59020859	1.814416	14.92731002	10.00995448
ENSRNOG00000014779	1	273636897	274840613	1.203716	8.860988506	5.213880113
ENSRNOG00000014787	1	75192829	76364316	1.171487	24.7170589	19.77640376
ENSRNOG00000014798	3	80028136	81173206	1.14507	48.20578682	43.95720522
ENSRNOG00000014844	7	131097390	133103553	2.006163	10.9380047	5.984261472
ENSRNOG00000014870	10	57927847	59825182	1.897335	8.748100833	5.28553094
ENSRNOG00000014886	17	78182413	78611368	0.428955	16.55147008	11.6559982
ENSRNOG00000014925	1	141028914	142430302	1.401388	7.524468981	5.24172757
ENSRNOG00000014946	1	188911150	190434465	1.523315	8.46911361	5.09662232

ENSRNOG00000015021	16	82900495	83450640	0.550145	32.65012189	28.33643998
ENSRNOG00000015061	10	13620578	15192207	1.571629	9.551584322	5.006226845
ENSRNOG00000015063	19	42097604	42268156	0.170552	17.46251473	12.4745167
ENSRNOG00000015068	5	57152405	59029956	1.877551	11.08385444	6.564535809
ENSRNOG00000015072	5	75799749	76480373	0.680624	34.84826315	33.20620392
ENSRNOG00000015078	1	213182291	214754512	1.572221	24.13420883	19.37072054
ENSRNOG00000015089	2	251977263	252105281	0.128018	20.91073062	16.80150471
ENSRNOG00000015093	14	6503544	7987206	1.483662	14.51811897	9.544883725
ENSRNOG00000015105	5	78062662	78859068	0.796406	14.10300668	11.10656757
ENSRNOG00000015113	18	16212842	17190650	0.977808	27.55382489	22.69116741
ENSRNOG00000015118	10	2827003	4728035	1.901032	6.972324349	5.235709418
ENSRNOG00000015121	19	21985018	22014759	0.029741	5.243883763	5.160855028
ENSRNOG00000015124	1	275247579	276817366	1.569787	7.305922386	5.314036766
ENSRNOG00000015139	17	8785932	10649513	1.863581	7.291781638	5.015942182
ENSRNOG00000015148	16	3505091	4298654	0.793563	7.451896801	5.086247774
ENSRNOG00000015152	1	212893010	214886525	1.993515	9.014502761	5.039699051
ENSRNOG00000015162	19	20894327	22403687	1.50936	12.81937942	8.10786098
ENSRNOG00000015179	19	36565459	37838079	1.27262	21.21144007	16.68069307
ENSRNOG00000015195	5	78331872	78720711	0.388839	6.427188147	5.097386354
ENSRNOG00000015226	2	202037692	203431565	1.393873	7.794282886	5.037585119
ENSRNOG00000015231	9	84649221	86479535	1.830314	7.649376848	5.428841885
ENSRNOG00000015237	3	7841854	9302236	1.460382	6.458193682	5.000828445
ENSRNOG00000015242	19	36486378	37838079	1.351701	7.721769306	5.143648164
ENSRNOG00000015253	19	36746858	37698612	0.951754	6.206495792	5.328055936
ENSRNOG00000015260	2	251977263	252105281	0.128018	18.58988463	13.82813489
ENSRNOG00000015268	1	246176443	247418727	1.242284	9.916118457	5.508188804
ENSRNOG00000015285	3	79914944	81371551	1.456607	12.57136817	7.959875498
ENSRNOG00000015292	17	56527852	57367405	0.839553	40.09298603	35.35498979
ENSRNOG00000015347	2	202319007	203936833	1.617826	25.52260997	21.05671454
ENSRNOG00000015353	2	227187716	227751218	0.563502	7.87115783	5.027676119
ENSRNOG00000015354	9	63990765	65936068	1.945303	32.40165941	27.60060294
ENSRNOG00000015368	1	188208327	190236961	2.028634	12.51054368	7.77049957
ENSRNOG00000015386	9	14595148	16579590	1.984442	9.272418679	6.11662639
ENSRNOG00000015425	2	252185614	253053939	0.868325	32.9524492	28.00043539
ENSRNOG00000015438	19	14090956	15301479	1.210523	11.08545215	6.478847684
ENSRNOG00000015449	2	28761889	28802364	0.040475	5.633621328	5.422827534
ENSRNOG00000015473	1	6519446	7764738	1.245292	12.30416914	7.537568861
ENSRNOG00000015480	5	172825006	173358345	0.533339	15.90798996	11.86184013
ENSRNOG00000015496	16	18801577	20076112	1.274535	6.239125829	5.066174249
ENSRNOG00000015519	19	15367389	15422122	0.054733	24.8704386	24.13612285
ENSRNOG00000015538	7	131579623	132497980	0.918357	19.35678905	14.44784158
ENSRNOG00000015546	18	16204297	17190650	0.986353	13.87983254	8.932790835
ENSRNOG00000015551	1	7416631	7797620	0.380989	46.63441741	43.38154058
ENSRNOG00000015562	5	24604586	25805526	1.20094	31.70660211	27.03016078
ENSRNOG00000015581	4	100899117	101219420	0.320303	20.52369501	19.31997201
ENSRNOG00000015583	7	121026448	121132409	0.105961	5.242037159	5.029287695

ENSRNOG00000015590	19	51866083	52767186	0.901103	7.792435491	5.562221868
ENSRNOG00000015593	1	213628153	214836999	1.208846	45.53677173	41.43842939
ENSRNOG00000015596	9	93919152	95404823	1.485671	8.210805722	5.242729251
ENSRNOG00000015615	13	24778523	26379877	1.601354	30.85671461	25.94789864
ENSRNOG00000015622	2	53416287	54119747	0.70346	14.53820667	9.708889427
ENSRNOG00000015636	3	7760759	9586338	1.825579	6.60660943	5.070503015
ENSRNOG00000015654	2	52193083	54168127	1.975044	8.214350682	5.198697004
ENSRNOG00000015660	1	7686726	7993998	0.307272	5.611719307	5.189481458
ENSRNOG00000015666	19	21655830	22014759	0.358929	5.231822143	5.001342744
ENSRNOG00000015670	1	21328397	22018276	0.689879	6.622896221	5.011026252
ENSRNOG00000015696	3	149687835	149941513	0.253678	7.327332045	5.01260469
ENSRNOG00000015713	1	176321413	178004443	1.68303	16.44825824	11.50940712
ENSRNOG00000015727	1	261576830	262793213	1.216383	6.637188358	5.385617574
ENSRNOG00000015733	9	118610690	119862253	1.251563	9.485017896	5.245236658
ENSRNOG00000015783	1	189239293	191353401	2.114108	10.02156546	5.33572776
ENSRNOG00000015799	4	116905712	118103366	1.197654	10.21974965	5.366431404
ENSRNOG00000015807	1	261483935	261985147	0.501212	25.59404202	22.29713815
ENSRNOG00000015830	1	213081266	214904082	1.822816	15.28943241	10.32061066
ENSRNOG00000015848	4	179006991	180443109	1.436118	8.656435932	5.041032536
ENSRNOG00000015895	18	15057562	15712466	0.654904	7.835567776	5.376478536
ENSRNOG00000015928	3	155289595	155363156	0.073561	6.120136137	5.240909384
ENSRNOG00000015932	1	247144521	248508530	1.364009	5.787304825	5.08997485
ENSRNOG00000015939	15	42541266	43491442	0.950176	7.186517844	5.040257692
ENSRNOG00000015956	1	69415748	70133026	0.717278	21.61205327	16.93176307
ENSRNOG00000015986	4	179128070	180283062	1.154992	31.83380583	26.91855047
ENSRNOG00000015987	2	244293280	244812897	0.519617	7.205757892	5.735000361
ENSRNOG00000016044	2	203255194	205219887	1.964693	8.420806108	5.2194585
ENSRNOG00000016046	17	53053098	54649465	1.596367	9.890710635	5.322110052
ENSRNOG00000016054	1	1757115	3055344	1.298229	10.78242511	5.847324697
ENSRNOG00000016062	3	149687835	150091067	0.403232	15.62131208	11.12162808
ENSRNOG00000016064	16	6528593	7526818	0.998225	13.54851397	8.873357376
ENSRNOG00000016109	10	55573072	56821958	1.248886	12.89736829	8.714723138
ENSRNOG00000016123	17	18859948	18933189	0.073241	9.710865818	8.193408507
ENSRNOG00000016135	17	29028539	29424277	0.395738	6.157952861	5.189465702
ENSRNOG00000016148	7	125874113	126779628	0.905515	17.87426489	13.19668432
ENSRNOG00000016163	2	57836869	58022304	0.185435	5.869081971	5.004890955
ENSRNOG00000016180	5	24604586	26202878	1.598292	7.8129674	5.082344033
ENSRNOG00000016190	19	10210023	11345216	1.135193	7.945017656	5.091490991
ENSRNOG00000016217	17	63178025	64127033	0.949008	9.900517948	5.339394459
ENSRNOG00000016220	3	11468512	12748068	1.279556	24.77496872	20.42028636
ENSRNOG00000016224	19	52571273	52769855	0.198582	17.75195453	12.93726919
ENSRNOG00000016242	4	26454979	26664910	0.209931	23.43990439	18.91651122
ENSRNOG00000016262	2	252130753	252486474	0.355721	16.38016217	11.77787605
ENSRNOG00000016265	1	275447330	276901265	1.453935	6.397382215	5.282432314
ENSRNOG00000016291	19	41237930	42001641	0.763711	7.153996479	5.100269864
ENSRNOG00000016315	9	16480959	17020826	0.539867	6.397300481	5.089474077

ENSRNOG00000016330	5	24262026	26202878	1.940852	9.857275523	5.006584699
ENSRNOG00000016348	19	41174243	42065336	0.891093	6.929579885	5.463276427
ENSRNOG00000016349	9	15607428	15818029	0.210601	5.434821986	5.122408755
ENSRNOG00000016351	2	219776456	220478476	0.70202	13.47463931	8.540783652
ENSRNOG00000016371	1	22566678	22791272	0.224594	5.368078266	5.179742493
ENSRNOG00000016374	1	200392441	200595216	0.202775	20.31795458	16.22427035
ENSRNOG00000016388	9	88815046	89307813	0.492767	7.886110413	5.022376134
ENSRNOG00000016451	2	185375629	186524198	1.148569	15.1921655	10.49993561
ENSRNOG00000016456	1	247369550	248620904	1.251354	5.922903422	5.084444566
ENSRNOG00000016460	15	42966291	43047105	0.080814	5.397706201	5.103389812
ENSRNOG00000016465	7	126123951	127005422	0.881471	15.81078019	10.821233
ENSRNOG00000016469	8	48990583	49596844	0.606261	26.25209321	23.24936091
ENSRNOG00000016470	9	99416730	100378310	0.96158	10.76335087	5.966248279
ENSRNOG00000016484	4	71133270	71732545	0.599275	19.51701048	14.53048059
ENSRNOG00000016496	1	151047846	152775630	1.727784	11.57259667	6.596068417
ENSRNOG00000016509	19	52368389	53291760	0.923371	8.823270438	5.110620436
ENSRNOG00000016528	6	12417692	13219477	0.801785	6.310947492	5.141464249
ENSRNOG00000016538	17	78898547	79372320	0.473773	6.284755438	5.130535189
ENSRNOG00000016545	10	13383609	15105433	1.721824	12.884444	8.026480768
ENSRNOG00000016581	17	32387373	33023758	0.636385	6.170411887	5.164567738
ENSRNOG00000016589	4	157446799	158415970	0.969171	8.122597972	5.018793431
ENSRNOG00000016619	16	19168111	19458513	0.290402	6.460960818	5.028884958
ENSRNOG00000016632	18	15007242	15710149	0.702907	11.18733003	6.321319953
ENSRNOG00000016645	16	6459201	7768199	1.308998	7.523801194	5.740436445
ENSRNOG00000016648	15	42486862	43684117	1.197255	9.328341254	5.022199648
ENSRNOG00000016659	1	276178497	277210635	1.032138	31.91179696	27.20199404
ENSRNOG00000016672	17	30440858	30920238	0.47938	15.74981633	10.85893191
ENSRNOG00000016675	18	38747063	40263323	1.51626	15.02353618	10.24573079
ENSRNOG00000016686	2	18069888	19746906	1.677018	8.912306599	5.057380739
ENSRNOG00000016727	5	135006221	135313694	0.307473	13.84760685	9.499548994
ENSRNOG00000016763	17	9046167	10098287	1.05212	5.569219394	5.099558771
ENSRNOG00000016774	10	14309380	14744464	0.435084	5.364790477	5.092231107
ENSRNOG00000016777	15	50816183	52036682	1.220499	12.46858553	9.392841046
ENSRNOG00000016815	1	152610429	153058099	0.44767	6.282779082	5.133935931
ENSRNOG00000016818	14	81462369	83256453	1.794084	11.72247696	6.806376132
ENSRNOG00000016831	1	163307679	165111711	1.804032	29.18300411	24.95837323
ENSRNOG00000016833	1	255575895	256425684	0.849789	6.376825984	5.085436938
ENSRNOG00000016847	8	50039390	51045109	1.005719	10.32142988	5.517187437
ENSRNOG00000016853	18	11984141	12041390	0.057249	38.51189718	34.3893687
ENSRNOG00000016867	17	9177707	10309452	1.131745	8.437236683	5.747882884
ENSRNOG00000016873	17	85819327	87141391	1.322064	10.32077802	5.464390565
ENSRNOG00000016926	1	276749523	278204125	1.454602	6.108729527	5.005285386
ENSRNOG00000016965	3	120743783	121830318	1.086535	6.455838256	5.049744226
ENSRNOG00000016971	19	41413657	42050801	0.637144	13.92328473	9.34389794
ENSRNOG00000016975	3	149941513	150091067	0.149554	12.94191171	8.909758541
ENSRNOG00000016980	1	197641899	199350244	1.708345	17.22392288	12.3353441

ENSRNOG00000016991	19	10268718	10902123	0.633405	6.358161652	5.24672944
ENSRNOG00000017036	18	61423008	62448121	1.025113	5.982736183	5.177974168
ENSRNOG00000017045	19	36486378	37996466	1.510088	9.676595575	5.230232132
ENSRNOG00000017051	16	5938967	7526818	1.587851	5.597725468	5.026495295
ENSRNOG00000017061	3	113072841	115026567	1.953726	9.356005697	5.006251602
ENSRNOG00000017090	19	21894993	22434622	0.539629	5.259345661	5.105417033
ENSRNOG00000017105	2	222010133	222445577	0.435444	15.09490412	13.84271152
ENSRNOG00000017108	7	120312478	122135544	1.823066	8.75017148	5.394799006
ENSRNOG00000017133	17	9734109	10945606	1.211497	8.119885805	5.200584685
ENSRNOG00000017151	8	50010529	51119644	1.109115	7.514412914	5.011004127
ENSRNOG00000017155	9	49248721	50203280	0.954559	26.75009365	21.9010613
ENSRNOG00000017159	18	10820499	11899942	1.079443	20.01844634	15.42453145
ENSRNOG00000017172	3	11845318	13699893	1.854575	6.445329151	5.10202877
ENSRNOG00000017206	9	80107634	81018616	0.910982	21.01738133	16.20822972
ENSRNOG00000017209	19	55983623	57221398	1.237775	13.60608189	8.931966837
ENSRNOG00000017212	5	165961594	167797767	1.836173	8.948413469	5.398753173
ENSRNOG00000017220	1	218248885	219844030	1.595145	7.801985222	5.004521247
ENSRNOG00000017286	15	42490697	43727554	1.236857	18.90845348	13.9314752
ENSRNOG00000017307	1	152755050	154338108	1.583058	13.63058764	9.030930023
ENSRNOG00000017311	1	153058738	155050995	1.992257	7.921988563	5.07842581
ENSRNOG00000017319	3	121021417	122003940	0.982523	6.416935492	5.016366147
ENSRNOG00000017321	1	277937609	279288776	1.351167	20.19153808	16.70745232
ENSRNOG00000017325	10	55705682	57523470	1.817788	18.29440765	14.95122566
ENSRNOG00000017340	9	65901026	66908382	1.007356	6.01727902	5.053658927
ENSRNOG00000017359	9	92247240	93275570	1.02833	6.890558989	5.03232555
ENSRNOG00000017382	8	61224390	62360470	1.13608	8.140313965	5.574830778
ENSRNOG00000017420	2	123153775	125079050	1.925275	11.07644695	7.240545184
ENSRNOG00000017438	1	279593244	280024345	0.431101	13.2559172	11.53664059
ENSRNOG00000017540	9	92247240	93402371	1.155131	7.725750783	5.000453211
ENSRNOG00000017553	7	121204265	121923277	0.719012	5.866943857	5.108296209
ENSRNOG00000017557	9	92247240	93275570	1.02833	9.569820545	5.004332325
ENSRNOG00000017577	17	31037258	31552005	0.514747	21.10350666	19.59030522
ENSRNOG00000017581	2	52329766	53159648	0.829882	8.329411559	5.08233942
ENSRNOG00000017595	17	79751502	81574233	1.822731	10.15697955	5.203203185
ENSRNOG00000017610	18	60354022	61047584	0.693562	12.40727982	7.540855147
ENSRNOG00000017621	1	196935291	197558620	0.623329	6.546082391	5.07293783
ENSRNOG00000017644	17	75409524	76711744	1.30222	16.3445109	12.15325247
ENSRNOG00000017646	19	53317122	54619276	1.302154	8.69470872	5.075318345
ENSRNOG00000017654	19	53291760	54659651	1.367891	8.243795231	5.076301805
ENSRNOG00000017669	2	199527084	200518443	0.991359	24.09983695	19.16405843
ENSRNOG00000017689	16	6384476	7768199	1.383723	6.219013382	5.077658859
ENSRNOG00000017693	5	166873901	168118725	1.244824	10.3561113	5.460658409
ENSRNOG00000017745	19	43154856	43516737	0.361881	7.848036251	5.133781931
ENSRNOG00000017753	1	79302148	81295030	1.992882	9.613759481	5.015688508
ENSRNOG00000017819	18	28753081	30462175	1.709094	7.210318877	5.067557029
ENSRNOG00000017820	17	31279808	33078419	1.798611	9.694222571	5.425278957

ENSRNOG00000017821	2	60360139	60631615	0.271476	46.222025	44.27560758
ENSRNOG00000017836	9	15715251	16664288	0.949037	22.01255086	18.54629271
ENSRNOG00000017843	3	176470398	177336004	0.865606	47.97583618	43.84860053
ENSRNOG00000017863	17	54207054	55216599	1.009545	6.311521975	5.008020753
ENSRNOG00000017866	17	23383611	24323854	0.940243	20.25049332	15.9705176
ENSRNOG00000017895	5	167079730	168207917	1.128187	27.41790271	23.38600767
ENSRNOG00000017900	1	174835720	175715402	0.879682	7.043777802	5.247125475
ENSRNOG00000017901	1	218667444	219285316	0.617872	48.13286995	46.16687283
ENSRNOG00000017915	10	55705682	57527146	1.821464	9.920919568	5.112991997
ENSRNOG00000017944	1	218667444	220074003	1.406559	5.427039193	5.141064766
ENSRNOG00000017945	2	30171263	31059808	0.888545	16.08788537	11.16390049
ENSRNOG00000017964	1	224608387	225661892	1.053505	5.737433167	5.041894335
ENSRNOG00000017965	18	62940886	63662295	0.721409	13.34471249	8.793237506
ENSRNOG00000017980	1	197916661	199722541	1.80588	7.052842778	5.278000572
ENSRNOG00000017983	3	2463606	2708048	0.244442	5.17482675	5.096469141
ENSRNOG00000017987	17	76382644	78236372	1.853728	15.48030741	11.41213656
ENSRNOG00000018005	3	114480199	114716934	0.236735	20.23161853	18.32987841
ENSRNOG00000018042	1	164592711	166246715	1.654004	6.405782091	5.037459942
ENSRNOG00000018044	17	76382644	78236372	1.853728	9.735124	5.4223583
ENSRNOG00000018047	8	127868626	128860253	0.991627	10.43310332	5.477860238
ENSRNOG00000018051	9	100403569	100988757	0.585188	33.89883407	29.66315072
ENSRNOG00000018053	18	59579849	60004276	0.424427	20.26006763	17.13816076
ENSRNOG00000018063	2	59908790	61421518	1.512728	9.877497714	5.152850438
ENSRNOG00000018066	1	205018805	206780628	1.761823	6.229012601	5.063898184
ENSRNOG00000018067	2	30171263	31007615	0.836352	7.323138818	5.036792059
ENSRNOG00000018076	2	199240788	200755768	1.51498	13.89579932	9.496329518
ENSRNOG00000018126	5	69235397	70727886	1.492489	6.564843618	5.225678836
ENSRNOG00000018220	2	199565713	200316793	0.75108	6.439537505	5.219922185
ENSRNOG00000018228	19	56304997	58168072	1.863075	6.774488619	5.407111938
ENSRNOG00000018297	2	29967578	31050380	1.082802	7.238080823	5.110019495
ENSRNOG00000018336	1	213628153	215344713	1.71656	13.34430357	8.525856406
ENSRNOG00000018338	5	173037316	173353643	0.316327	7.110545512	5.80074551
ENSRNOG00000018346	17	35075983	36514676	1.438693	6.386374787	5.056955959
ENSRNOG00000018349	3	120916199	122587554	1.671355	8.622791803	5.016801069
ENSRNOG00000018371	18	62360626	62965201	0.604575	5.932608937	5.010318609
ENSRNOG00000018375	5	135617163	136158812	0.541649	6.1856646	5.064231366
ENSRNOG00000018378	17	81940064	82063274	0.12321	15.5645169	12.77458827
ENSRNOG00000018387	18	59579849	59964313	0.384464	5.038007117	5.032665512
ENSRNOG00000018402	1	79599485	81502393	1.902908	7.475885939	5.170092923
ENSRNOG00000018405	1	79599485	81178891	1.579406	15.45421003	10.58667478
ENSRNOG00000018412	14	82704996	84001037	1.296041	16.36290511	11.74007789
ENSRNOG00000018463	5	135014399	136323648	1.309249	14.84159498	10.52890322
ENSRNOG00000018505	18	63043403	63414066	0.370663	12.99782177	10.73870493
ENSRNOG00000018507	4	118107249	119111048	1.003799	8.152994383	5.534818471
ENSRNOG00000018531	1	139705664	141483020	1.777356	12.04789727	7.646955665
ENSRNOG00000018547	1	140293139	141464155	1.171016	16.62768158	12.23069123

ENSRNOG00000018576	5	153793301	154377397	0.584096	7.07589143	5.032251904
ENSRNOG00000018584	9	93313080	94464855	1.151775	12.71523989	7.728437826
ENSRNOG00000018590	14	82613144	83765872	1.152728	5.717881766	5.086011902
ENSRNOG00000018627	1	164691865	166663892	1.972027	8.646620589	5.04892107
ENSRNOG00000018649	3	161812224	162244520	0.432296	34.91224465	30.30425002
ENSRNOG00000018651	17	6488252	6611268	0.123016	11.01640654	6.050123893
ENSRNOG00000018662	2	60464644	61299049	0.834405	6.808659725	5.531608726
ENSRNOG00000018665	8	50062636	50784690	0.722054	6.205237831	5.130955785
ENSRNOG00000018748	10	56660414	57799821	1.139407	24.56345731	20.3531676
ENSRNOG00000018775	18	29031074	30159411	1.128337	11.94939499	7.529200094
ENSRNOG00000018781	16	19364657	20936532	1.571875	8.355398001	5.080715046
ENSRNOG00000018801	19	54498935	55160774	0.661839	8.410720987	6.276022817
ENSRNOG00000018816	8	61325005	62987448	1.662443	24.74294258	19.82423977
ENSRNOG00000018832	3	13717957	14949900	1.231943	9.870527124	5.035626313
ENSRNOG00000018848	8	128258967	129279883	1.020916	8.148449174	5.021030411
ENSRNOG00000018865	2	60325751	61299049	0.973298	17.00755398	13.47201491
ENSRNOG00000018876	3	3821980	4781243	0.959263	6.400795762	5.472086841
ENSRNOG00000018884	19	57143859	57900138	0.756279	6.038936985	5.012387707
ENSRNOG00000018898	8	61325005	63026246	1.701241	15.88456687	10.99867161
ENSRNOG00000018901	3	13926228	14654415	0.728187	9.500338855	6.741639996
ENSRNOG00000018916	1	199809065	200009740	0.200675	5.742592545	5.356359422
ENSRNOG00000018929	1	253051271	254147197	1.095926	7.701959366	5.855429797
ENSRNOG00000018962	1	198741696	199761331	1.019635	6.619968876	5.292010308
ENSRNOG00000018964	3	150270438	151521853	1.251415	10.85228019	7.285688634
ENSRNOG00000018997	3	150615687	151522448	0.906761	6.533147244	5.15885801
ENSRNOG00000019007	8	128258967	128990491	0.731524	7.611614216	5.081447936
ENSRNOG00000019012	9	100278565	101710153	1.431588	26.54909512	22.13885526
ENSRNOG00000019050	1	252686667	252745431	0.058764	43.62187904	39.28010835
ENSRNOG00000019098	19	54477743	55491834	1.014091	9.637402631	5.294326206
ENSRNOG00000019099	3	161812224	162244520	0.432296	12.54352488	10.71115921
ENSRNOG00000019108	17	6433961	6998010	0.564049	12.19373746	7.358101393
ENSRNOG00000019110	3	161085289	162803339	1.71805	9.475046594	5.006479708
ENSRNOG00000019118	3	161812224	162244520	0.432296	12.21514916	9.68842307
ENSRNOG00000019136	8	61343063	62031057	0.687994	5.695198412	5.081135575
ENSRNOG00000019164	X	917818	2582841	1.665023	7.71061842	5.09493229
ENSRNOG00000019180	X	113682563	113781509	0.098946	6.076353132	5.170435162
ENSRNOG00000019208	10	58795608	59770639	0.975031	43.92999464	40.73152435
ENSRNOG00000019219	4	157572142	157759375	0.187233	21.99079604	21.2874369
ENSRNOG00000019253	19	43763516	44925318	1.161802	7.048505388	5.030005886
ENSRNOG00000019282	17	6408705	6918490	0.509785	7.861734139	5.071885779
ENSRNOG00000019290	19	37219003	37996466	0.777463	9.47871639	5.185019304
ENSRNOG00000019299	3	150752530	151141672	0.389142	5.169988896	5.165637879
ENSRNOG00000019316	9	95457200	96408555	0.951355	9.27864548	5.352463055
ENSRNOG00000019328	2	199961266	201119394	1.158128	5.967616817	5.048458268
ENSRNOG00000019330	3	150615687	151548828	0.933141	15.72101341	10.78805474
ENSRNOG00000019352	10	58795608	60491151	1.695543	11.48205572	7.143518207

ENSRNOG00000019357	10	58755507	59787086	1.031579	6.227336024	5.67428679
ENSRNOG00000019368	4	157766222	157842589	0.076367	5.152937272	5.100829818
ENSRNOG00000019412	2	187545902	187935765	0.389863	15.75145001	12.05345754
ENSRNOG00000019414	2	187645874	187935765	0.289891	28.23712384	24.527293
ENSRNOG00000019416	1	80327236	81178891	0.851655	14.66172887	9.863148665
ENSRNOG00000019417	2	199688540	201586583	1.898043	7.421610677	5.213998905
ENSRNOG00000019425	19	43763516	44742707	0.979191	10.25753842	5.322222441
ENSRNOG00000019434	19	43968628	44748029	0.779401	6.095509049	5.024069239
ENSRNOG00000019464	1	224322972	225996710	1.673738	9.48776799	5.043550261
ENSRNOG00000019508	2	200316793	202130005	1.813212	9.193525825	5.057732266
ENSRNOG00000019519	17	6713614	6719587	0.005973	48.48341033	43.83264807
ENSRNOG00000019550	7	141223467	142308119	1.084652	11.83010993	7.432279788
ENSRNOG00000019552	7	10727571	12694259	1.966688	5.946056999	5.005883678
ENSRNOG00000019560	1	167257777	167618129	0.360352	7.544887468	6.589639469
ENSRNOG00000019574	1	266196291	266901916	0.705625	13.82285933	9.009539157
ENSRNOG00000019578	1	84493297	85546865	1.053568	12.98663708	8.010601783
ENSRNOG00000019587	9	81603794	82822222	1.218428	11.32381149	7.266257211
ENSRNOG00000019626	1	65578271	66359552	0.781281	6.006342323	5.21698243
ENSRNOG00000019656	16	7619832	8724438	1.104606	7.203461711	5.123665765
ENSRNOG00000019657	16	19869346	20691649	0.822303	5.450532121	5.292321632
ENSRNOG00000019659	10	58936815	59962335	1.02552	8.634107987	6.714733859
ENSRNOG00000019680	8	116681627	117603463	0.921836	25.87099112	21.00209079
ENSRNOG00000019702	1	84485008	85546865	1.061857	10.48619112	6.079526157
ENSRNOG00000019704	9	81603794	82822222	1.218428	5.771560697	5.146704385
ENSRNOG00000019716	4	158632874	158730966	0.098092	37.40467144	33.16854234
ENSRNOG00000019734	9	17020826	18070350	1.049524	9.074353044	5.166222851
ENSRNOG00000019741	16	20393816	21559571	1.165755	32.49942987	28.32532165
ENSRNOG00000019745	1	219285316	220163430	0.878114	5.233501029	5.001774392
ENSRNOG00000019754	2	202000399	203481327	1.480928	16.53439142	11.84618686
ENSRNOG00000019768	16	8239976	8933405	0.693429	5.920789253	5.43151917
ENSRNOG00000019785	2	205455277	207481833	2.026556	12.89004726	8.912585967
ENSRNOG00000019825	1	219684194	220724345	1.040151	6.542054779	5.197182222
ENSRNOG00000019854	1	99606812	101204731	1.597919	10.38296337	6.992614642
ENSRNOG00000019859	19	38013453	38569378	0.555925	7.871698978	6.441889441
ENSRNOG00000019873	1	224694210	226087170	1.39296	14.08674388	10.87632765
ENSRNOG00000019918	10	88827682	89820785	0.993103	18.22783327	13.32802735
ENSRNOG00000019922	19	57605159	58860876	1.255717	11.96772001	6.972297575
ENSRNOG00000019931	19	58555871	58840928	0.285057	5.647410795	5.528147018
ENSRNOG00000019950	1	219285316	221154108	1.868792	6.182555415	5.038217769
ENSRNOG00000019960	1	197916661	199241014	1.324353	24.5214432	19.62805245
ENSRNOG00000019962	1	86863159	87040261	0.177102	18.23102724	17.3144925
ENSRNOG00000019970	1	220070123	221208562	1.138439	8.886442426	5.187596091
ENSRNOG00000019995	18	29059891	29324157	0.264266	5.897284511	5.253521366
ENSRNOG00000019999	1	80917879	82032626	1.114747	7.472324784	5.067085904
ENSRNOG00000020006	10	14425123	15820515	1.395392	27.96354643	24.05643245
ENSRNOG00000020035	1	265479167	267097337	1.61817	8.775557085	5.078970258

ENSRNOG00000020056	10	88958066	89540093	0.582027	7.541861507	5.03419274
ENSRNOG00000020119	18	29031074	30569486	1.538412	20.57210179	15.80712946
ENSRNOG00000020144	1	199965390	200274279	0.308889	5.412706327	5.052839879
ENSRNOG00000020148	1	99946302	100411853	0.465551	5.462566743	5.015072299
ENSRNOG00000020151	19	38707330	39151735	0.444405	22.4394127	18.72110812
ENSRNOG00000020155	16	10526514	10660691	0.134177	6.346191135	6.000674375
ENSRNOG00000020167	18	26614435	27414689	0.800254	9.051661649	6.378634132
ENSRNOG00000020202	1	224374513	225946042	1.571529	50.95957708	46.02153415
ENSRNOG00000020280	16	20215376	21555762	1.340386	8.362097727	5.089883415
ENSRNOG00000020298	1	199365909	200274279	0.90837	7.033228345	5.232754896
ENSRNOG00000020318	1	99921627	101204731	1.283104	21.22826723	16.29730465
ENSRNOG00000020371	1	166372895	167758350	1.385455	6.852994879	5.377671304
ENSRNOG00000020374	10	14825303	15826280	1.000977	7.262558717	5.044136654
ENSRNOG00000020379	19	38381985	39999346	1.617361	7.295203303	5.099490022
ENSRNOG00000020392	2	211479367	212360191	0.880824	7.23043627	5.197693718
ENSRNOG00000020424	1	202442468	202914473	0.472005	6.82384877	5.165844634
ENSRNOG00000020425	1	166507125	167748019	1.240894	16.71076123	11.75115696
ENSRNOG00000020430	1	202033010	202699583	0.666573	5.768882644	5.174585048
ENSRNOG00000020443	1	101036075	101204731	0.168656	5.76089338	5.033287727
ENSRNOG00000020456	1	184153220	186078248	1.925028	7.261417737	5.082124638
ENSRNOG00000020527	1	220530357	221408253	0.877896	7.044493128	5.063701672
ENSRNOG00000020533	1	201229377	201588988	0.359611	25.78769768	23.74932513
ENSRNOG00000020541	10	14676518	16232696	1.556178	7.568908106	5.011427551
ENSRNOG00000020557	1	87040261	89003631	1.96337	9.685274341	5.124329537
ENSRNOG00000020560	1	201195911	201996973	0.801062	6.943615723	5.131728866
ENSRNOG00000020571	10	14676518	16290601	1.614083	9.340431702	5.022024318
ENSRNOG00000020623	1	100199769	101204731	1.004962	7.427525592	5.039198973
ENSRNOG00000020624	1	201195911	201996973	0.801062	20.07528823	15.32856797
ENSRNOG00000020626	10	14804883	16116193	1.31131	7.203979208	5.136268291
ENSRNOG00000020630	10	16215776	16555900	0.340124	5.781863458	5.073811131
ENSRNOG00000020636	1	86863159	87317431	0.454272	15.87833635	10.90734467
ENSRNOG00000020673	2	187935765	188891036	0.955271	5.511474366	5.471861994
ENSRNOG00000020676	1	86863159	87941642	1.078483	7.458556749	5.451720421
ENSRNOG00000020678	10	88579381	90359757	1.780376	9.332851882	5.204812194
ENSRNOG00000020684	10	88695236	89797942	1.102706	11.04439117	6.303825716
ENSRNOG00000020688	8	118153240	118156334	0.003094	6.086239978	5.062662572
ENSRNOG00000020698	10	88978708	89521977	0.543269	26.2869314	24.37405726
ENSRNOG00000020702	1	226465528	226927498	0.46197	22.70438259	20.58268202
ENSRNOG00000020721	8	117220846	118925008	1.704162	8.023993481	6.015119709
ENSRNOG00000020736	1	216117689	217080283	0.962594	9.459514502	5.28714372
ENSRNOG00000020737	8	117964731	118925008	0.960277	5.77164423	5.093066761
ENSRNOG00000020748	8	117220846	119132952	1.912106	11.70798685	7.157562691
ENSRNOG00000020751	10	88958066	90288686	1.33062	7.218783826	5.198695452
ENSRNOG00000020770	10	88971891	90129442	1.157551	8.5093677	5.393999205
ENSRNOG00000020775	1	82786294	84104477	1.318183	6.735293223	5.037493576
ENSRNOG00000020805	10	88971891	90343296	1.371405	6.599901733	5.000012067

ENSRNOG00000020817	1	82786294	84739627	1.953333	19.23606273	14.56230573
ENSRNOG00000020837	10	88994072	90919781	1.925709	7.648534382	5.040391418
ENSRNOG00000020871	1	83306478	84739627	1.433149	5.301205212	5.01027663
ENSRNOG00000020951	10	89836464	90521387	0.684923	18.33276559	14.08427798
ENSRNOG00000020953	1	227449624	227679625	0.230001	6.419658362	5.024442357
ENSRNOG00000020980	1	226939481	228807126	1.867645	13.13046256	8.140173521
ENSRNOG00000020989	1	220470538	222382556	1.912018	6.432951363	5.11241749
ENSRNOG00000021005	1	227267366	228181803	0.914437	5.90348891	5.124825794
ENSRNOG00000021010	1	220875583	222513043	1.63746	14.8257408	10.18724365
ENSRNOG00000021023	1	88818756	90301334	1.482578	14.78714716	9.902462245
ENSRNOG00000021047	8	119520743	119742105	0.221362	5.208467467	5.102719028
ENSRNOG00000021084	1	227900292	229155864	1.255572	5.95123237	5.014968771
ENSRNOG00000021091	8	118655787	119742105	1.086318	15.54171021	10.64868926
ENSRNOG00000021102	1	88914548	90478703	1.564155	9.771494513	5.018541273
ENSRNOG00000021125	1	221572491	222501520	0.929029	28.60032104	24.45292097
ENSRNOG00000021185	2	198037733	198942587	0.904854	15.32486451	10.39018736
ENSRNOG00000021202	1	221885174	223536189	1.651015	7.853113899	5.122637113
ENSRNOG00000021213	2	198037733	198919543	0.88181	16.47418888	11.48590315
ENSRNOG00000021221	3	121975766	123158857	1.183091	8.442549702	5.236905256
ENSRNOG00000021230	3	122411349	123158857	0.747508	6.023451063	5.00437782
ENSRNOG00000021316	10	67263048	69060820	1.797772	6.21339776	5.026571643
ENSRNOG00000021345	10	30757681	32577922	1.820241	17.62577492	12.98619101
ENSRNOG00000021392	5	173484179	173520838	0.036659	6.215215651	5.665288774
ENSRNOG00000021399	11	31621813	31973239	0.351426	5.283266462	5.152808061
ENSRNOG00000021405	1	148149065	148403655	0.25459	10.81752111	7.63995911
ENSRNOG00000021412	10	70072706	70763465	0.690759	20.8612335	18.91759509
ENSRNOG00000021424	10	103682531	104243177	0.560646	31.88752376	26.89666531
ENSRNOG00000021474	1	98208115	99536175	1.32806	28.86826468	24.32587278
ENSRNOG00000021517	19	43879357	44742707	0.86335	14.38383463	9.475037328
ENSRNOG00000021526	5	159530026	160540436	1.01041	14.73718016	10.08026826
ENSRNOG00000021555	11	30765018	30981770	0.216752	57.25078005	56.63652307
ENSRNOG00000021659	1	99332545	101204731	1.872186	7.66564109	5.240373136
ENSRNOG00000021693	16	49411631	49811355	0.399724	17.14538039	12.1923775
ENSRNOG00000021702	5	8034303	9846275	1.811972	13.50665449	8.702704354
ENSRNOG00000021704	5	57815148	59771675	1.956527	11.71520504	6.894701938
ENSRNOG00000021719	10	70060835	70763465	0.70263	6.111637818	5.166436268
ENSRNOG00000021726	16	49744831	49979812	0.234981	21.38248802	16.58732295
ENSRNOG00000021748	X	65050076	65218553	0.168477	33.8653795	31.75796059
ENSRNOG00000021763	1	256525435	257406239	0.880804	12.65701127	7.90927759
ENSRNOG00000021780	10	69662119	70591035	0.928916	24.67064274	19.82932845
ENSRNOG00000021808	19	24353020	24970706	0.617686	5.94032619	5.045965663
ENSRNOG00000021817	4	145548528	146626617	1.078089	5.753141185	5.057259235
ENSRNOG00000021839	8	5282156	6890343	1.608187	6.974328744	5.110124188
ENSRNOG00000021855	4	56980503	57683828	0.703325	5.611771377	5.141160578
ENSRNOG00000021882	17	8569940	10519300	1.94936	9.169532624	5.112949796
ENSRNOG00000021892	7	34247627	34981020	0.733393	13.57055383	8.69343669

ENSRNOG00000021931	14	23429760	23674309	0.244549	5.036301	5.012245461
ENSRNOG00000021966	16	2691279	3641715	0.950436	6.147081151	5.045598055
ENSRNOG00000021984	13	92834965	94232392	1.397427	17.10465046	12.44514152
ENSRNOG00000022071	10	90011566	91259660	1.248094	11.58063378	7.019062051
ENSRNOG00000022141	3	113460086	114898349	1.438263	5.863857732	5.022853531
ENSRNOG00000022171	12	36870812	36906695	0.035883	5.22954841	5.212201578
ENSRNOG00000022199	5	138280246	138580651	0.300405	17.81212221	13.06432875
ENSRNOG00000022202	18	14978310	15440733	0.462423	5.60988234	5.216782822
ENSRNOG00000022273	1	235598235	236553920	0.955685	14.48979306	9.891086461
ENSRNOG00000022303	19	39182937	39595098	0.412161	6.981538396	5.306259193
ENSRNOG00000022312	3	11739971	11845318	0.105347	6.250327399	5.065905627
ENSRNOG00000022320	16	48478908	49733260	1.254352	8.254281711	5.425465099
ENSRNOG00000022321	1	140146292	140758204	0.611912	17.95873373	13.17015152
ENSRNOG00000022323	5	13520085	15333447	1.813362	7.519330871	5.005322289
ENSRNOG00000022368	16	21029220	21607701	0.578481	5.042313004	5.012317708
ENSRNOG00000022482	16	46908419	48435521	1.527102	6.401594634	5.014112456
ENSRNOG00000022485	1	263268427	264293861	1.025434	10.86364664	7.11810666
ENSRNOG00000022570	7	135285121	136133892	0.848771	15.34511166	10.72893148
ENSRNOG00000022576	9	104774446	105840244	1.065798	9.468316473	5.011376161
ENSRNOG00000022586	3	11864846	12381436	0.51659	6.22595588	5.894561495
ENSRNOG00000022609	9	15497017	15750626	0.253609	48.30370281	44.6583783
ENSRNOG00000022660	3	95402825	95739964	0.337139	5.570526657	5.166181097
ENSRNOG00000022698	12	43992237	45279502	1.287265	19.57104829	14.78639822
ENSRNOG00000022702	8	58825302	60727102	1.9018	9.065910768	5.084247088
ENSRNOG00000022741	8	22865552	23254775	0.389223	5.699632297	5.065249329
ENSRNOG00000022760	15	56274119	57440932	1.166813	8.578157391	5.02797926
ENSRNOG00000022822	1	128678664	129386409	0.707745	36.8817642	33.8550859
ENSRNOG00000022894	9	49900225	51120070	1.219845	8.652937158	5.003138489
ENSRNOG00000022911	9	94352017	95542869	1.190852	11.59441845	6.624475329
ENSRNOG00000022932	7	123537762	124755724	1.217962	42.05393245	38.16955562
ENSRNOG00000022943	7	2582982	3785094	1.202112	7.316996155	5.525903576
ENSRNOG00000023013	18	51752175	52130877	0.378702	7.879149867	5.854482459
ENSRNOG00000023079	2	205383376	205455277	0.071901	5.515937807	5.179647159
ENSRNOG00000023143	10	56924989	57866219	0.94123	7.881280153	5.215600069
ENSRNOG00000023227	3	63246197	63874902	0.628705	9.285734555	5.574959431
ENSRNOG00000023233	1	98497230	100190361	1.693131	10.07335496	5.09126527
ENSRNOG00000023261	X	10014840	11419114	1.404274	14.79122826	12.98104703
ENSRNOG00000023274	1	127955911	128803610	0.847699	8.382576238	5.225967178
ENSRNOG00000023278	17	75543998	76365709	0.821711	5.90931658	5.046257928
ENSRNOG00000023334	11	67191513	69117451	1.925938	12.33754888	7.555920877
ENSRNOG00000023338	2	204498829	205455277	0.956448	6.005531747	5.057385141
ENSRNOG00000023366	12	23101509	24526122	1.424613	12.77189314	8.068854761
ENSRNOG00000023452	5	165188321	166470779	1.282458	7.390802275	5.075549788
ENSRNOG00000023455	5	134062008	134430961	0.368953	7.16277113	5.090790963
ENSRNOG00000023463	11	67225867	68754781	1.528914	14.6588432	10.60027106
ENSRNOG00000023476	10	103682531	104433643	0.751112	13.05325324	8.189989024

ENSRNOG00000023521	1	83520213	85459036	1.938823	9.628717578	5.474438194
ENSRNOG00000023546	12	22843563	24605991	1.762428	11.58418914	7.118920711
ENSRNOG00000023576	9	49667780	51120070	1.45229	6.27306157	5.068936887
ENSRNOG00000023588	2	23036718	23772019	0.735301	19.75867027	15.17330825
ENSRNOG00000023591	6	75290990	76363747	1.072757	15.70107185	11.44916727
ENSRNOG00000023664	5	119750094	121655533	1.905439	6.608210171	5.034636785
ENSRNOG00000023778	17	21385302	22726692	1.34139	10.18161034	6.152812391
ENSRNOG00000023837	2	21630791	21976615	0.345824	5.223542655	5.177781883
ENSRNOG00000023841	15	6106553	6234879	0.128326	6.16216812	5.021785233
ENSRNOG00000023874	3	112954038	113412254	0.458216	10.50994156	5.825572112
ENSRNOG00000023919	12	30065218	30951867	0.886649	6.652917371	5.129007209
ENSRNOG00000023937	14	1465283	3149312	1.684029	21.65740558	16.87194045
ENSRNOG00000023991	16	82700432	83885268	1.184836	6.870503482	5.010532791
ENSRNOG00000024012	5	171532785	172730494	1.197709	9.44516193	5.147092109
ENSRNOG00000024016	1	148236882	148403655	0.166773	20.47853486	16.0112146
ENSRNOG00000024040	11	74908813	75568545	0.659732	20.32463758	15.65105793
ENSRNOG00000024056	1	98652483	98816944	0.164461	5.496854593	5.365795288
ENSRNOG00000024066	18	11558	866566	0.855008	10.83393526	10.47321487
ENSRNOG00000024073	1	212620175	214313215	1.69304	20.25697981	16.56227714
ENSRNOG00000024115	2	54337097	55040273	0.703176	26.07114211	21.29428732
ENSRNOG00000024241	18	26669780	27414689	0.744909	6.897075566	5.624002973
ENSRNOG00000024266	1	88839580	89917036	1.077456	6.769407253	5.229128577
ENSRNOG00000024372	6	18084646	18602735	0.518089	9.182927569	8.05856541
ENSRNOG00000024376	1	80929862	81153956	0.224094	9.534327965	5.199730459
ENSRNOG00000024384	11	73316846	74227277	0.910431	30.36762305	25.56838319
ENSRNOG00000024437	3	153133471	154446323	1.312852	6.69787967	5.105663809
ENSRNOG00000024445	10	11429730	11857274	0.427544	6.008134101	5.093219174
ENSRNOG00000024455	10	13618308	14682393	1.064085	6.752629024	5.001219848
ENSRNOG00000024460	1	125549050	126789156	1.240106	12.42983617	7.467266081
ENSRNOG00000024525	6	17913046	18602735	0.689689	11.26010758	6.470460002
ENSRNOG00000024530	1	188816159	189958082	1.141923	5.367871488	5.0193571
ENSRNOG00000024545	14	1978523	2823146	0.844623	30.06082988	25.24469005
ENSRNOG00000024553	10	58416797	59962335	1.545538	11.16052277	6.318815491
ENSRNOG00000024563	3	111174664	113216730	2.042066	7.151462478	5.043913724
ENSRNOG00000024591	10	50273229	51309753	1.036524	19.55942286	16.01028482
ENSRNOG00000024733	2	182462826	183136203	0.673377	13.44608964	8.586449297
ENSRNOG00000024751	20	30985263	32376820	1.391557	11.27018825	6.416109112
ENSRNOG00000024809	3	8728854	9763711	1.034857	8.238951463	5.302623506
ENSRNOG00000024824	7	113132531	113503953	0.371422	6.544669935	5.068871807
ENSRNOG00000024832	17	87229039	89368776	2.139737	9.459590901	5.075336244
ENSRNOG00000024839	20	30642068	31286058	0.64399	24.04565482	19.61405239
ENSRNOG00000024846	3	8182661	9719811	1.53715	8.1889214	5.633816157
ENSRNOG00000024899	14	14841194	16235455	1.394261	7.683816848	5.059849852
ENSRNOG00000024918	20	44034155	45074390	1.040235	10.59356955	5.664830383
ENSRNOG00000024922	12	21220318	22100284	0.879966	5.717850876	5.358794448
ENSRNOG00000024924	11	71431989	72539073	1.107084	21.52997513	17.251354

ENSRNOG00000025040	5	75854983	76480373	0.62539	30.7558925	25.87453643
ENSRNOG00000025100	13	47232258	48996483	1.764225	12.50003154	7.963507053
ENSRNOG00000025115	8	57156148	58949443	1.793295	13.37515221	8.54730703
ENSRNOG00000025141	3	140996782	141716224	0.719442	17.84865024	13.35080637
ENSRNOG00000025155	12	11482589	13488668	2.006079	8.107208594	5.251093207
ENSRNOG00000025160	2	224543700	225766628	1.222928	10.82666072	5.891369498
ENSRNOG00000025216	1	88849229	88888532	0.039303	5.26187296	5.259497883
ENSRNOG00000025231	19	36486378	37629742	1.143364	7.202355643	5.006759004
ENSRNOG00000025245	1	218205234	219285316	1.080082	7.047649255	5.177004938
ENSRNOG00000025252	11	88127998	89742599	1.614601	6.85669556	5.003531714
ENSRNOG00000025274	2	27322949	27777992	0.455043	5.939376593	5.779243499
ENSRNOG00000025324	18	63115696	63662295	0.546599	7.23694	5.103658568
ENSRNOG00000025354	1	86863159	87941642	1.078483	10.21242648	5.582562919
ENSRNOG00000025378	1	100352007	101204731	0.852724	6.220720014	5.218520283
ENSRNOG00000025404	11	54452949	55225321	0.772372	6.114959272	5.146160749
ENSRNOG00000025444	1	251532124	252284053	0.751929	12.29089618	7.565307921
ENSRNOG00000025476	1	242424396	243564987	1.140591	8.778400933	5.523476095
ENSRNOG00000025489	18	27013969	27133819	0.11985	5.451818596	5.170125716
ENSRNOG00000025596	5	143745998	144734612	0.988614	6.690752751	5.053605541
ENSRNOG00000025601	8	131712054	132799553	1.087499	24.9236447	20.49012868
ENSRNOG00000025608	2	181199446	182183978	0.984532	7.651767417	5.098051958
ENSRNOG00000025612	12	49394909	50912126	1.517217	18.65723347	13.881642
ENSRNOG00000025648	6	95783525	96114139	0.330614	5.430240251	5.151361953
ENSRNOG00000025669	10	103742242	104433643	0.691401	5.441020747	5.07552817
ENSRNOG00000025670	14	42299292	42992903	0.693611	19.01150212	16.5006575
ENSRNOG00000025781	1	263268427	264497540	1.229113	9.579661549	5.438681432
ENSRNOG00000025808	9	17563584	18052250	0.488666	15.21254122	10.5683196
ENSRNOG00000025898	7	131463659	133103553	1.639894	8.673915143	5.058893918
ENSRNOG00000025899	6	7401410	8184893	0.783483	7.553660346	5.046062086
ENSRNOG00000025936	12	39898098	41603712	1.705614	9.515959595	5.033154185
ENSRNOG00000025948	13	52881716	53157055	0.275339	24.34638339	20.92483633
ENSRNOG00000025980	3	110024943	111966263	1.94132	10.71331289	5.776054661
ENSRNOG00000025997	3	14686820	15302729	0.615909	5.601322025	5.202207949
ENSRNOG00000025998	20	48884448	49359105	0.474657	38.981227	35.21677759
ENSRNOG00000026025	9	17563584	18052250	0.488666	20.93095346	16.41581204
ENSRNOG00000026040	1	198630528	199751672	1.121144	8.227662816	5.113481345
ENSRNOG00000026049	20	48858860	49671540	0.81268	10.60339042	5.741041842
ENSRNOG00000026051	20	3185771	3769641	0.58387	47.35022248	42.62942939
ENSRNOG00000026087	13	52790882	52825583	0.034701	52.64404308	49.77427601
ENSRNOG00000026109	1	100001871	101204731	1.20286	13.61598643	9.366663231
ENSRNOG00000026128	7	131097390	132775688	1.678298	12.35916058	8.755181394
ENSRNOG00000026157	X	45376915	46384613	1.007698	5.777798555	5.012318825
ENSRNOG00000026162	2	124282759	124419927	0.137168	5.941193498	5.06298875
ENSRNOG00000026171	8	64109846	65122065	1.012219	8.863148462	5.538405914
ENSRNOG00000026177	4	67977227	69542088	1.564861	15.39850377	10.68516474
ENSRNOG00000026204	1	277272567	277902859	0.630292	6.462490716	5.03177083

ENSRNOG00000026238	8	63026246	63618780	0.592534	19.02758068	14.31147035
ENSRNOG00000026267	X	69562616	70331374	0.768758	6.677024201	6.126249808
ENSRNOG00000026286	17	19000221	19043288	0.043067	7.407899372	6.486860463
ENSRNOG00000026323	5	113413716	114097898	0.684182	5.785691937	5.490917275
ENSRNOG00000026407	20	34733374	35274087	0.540713	6.436664911	5.094637974
ENSRNOG00000026425	7	129949665	130443383	0.493718	7.075468047	5.013778986
ENSRNOG00000026542	13	79725738	79902863	0.177125	6.275081567	5.92561895
ENSRNOG00000026577	8	113268184	113401189	0.133005	6.28789965	5.084224349
ENSRNOG00000026600	7	55076666	55260948	0.184282	5.180789887	5.165415044
ENSRNOG00000026604	3	7841854	9302236	1.460382	9.345921673	5.715276526
ENSRNOG00000026646	5	141108950	141388521	0.279571	55.08450744	53.79247332
ENSRNOG00000026662	5	23490557	24636112	1.145555	7.802430588	5.511351013
ENSRNOG00000026702	8	48878239	49859233	0.980994	14.65328779	10.08250093
ENSRNOG00000026742	6	23672778	24913197	1.240419	6.772945843	5.116769844
ENSRNOG00000026799	20	5680081	5689586	0.009505	5.25654504	5.233412082
ENSRNOG00000026842	2	51885699	53127278	1.241579	9.583955055	5.049473987
ENSRNOG00000026861	1	65614152	66345057	0.730905	16.06027795	13.70039226
ENSRNOG00000026898	5	147410121	148052425	0.642304	9.32031934	5.371166474
ENSRNOG00000026913	7	54096941	54476920	0.379979	6.219266549	5.087465904
ENSRNOG00000026978	5	144096197	144131475	0.035278	23.19243953	20.26384133
ENSRNOG00000026994	19	56150634	57293791	1.143157	9.448709586	6.201355541
ENSRNOG00000027024	13	70717741	71853566	1.135825	5.824296157	5.22941397
ENSRNOG00000027039	10	43090124	44598387	1.508263	12.71092974	7.901773846
ENSRNOG00000027115	6	108144351	109484680	1.340329	10.22620593	5.339437351
ENSRNOG00000027139	10	87165782	87881851	0.716069	6.68182474	5.233514608
ENSRNOG00000027193	3	6636809	7041167	0.404358	22.28707717	17.84117407
ENSRNOG00000027228	1	164132451	165111711	0.97926	5.783255246	5.014904348
ENSRNOG00000027259	10	43069504	43630156	0.560652	14.96864558	9.99765803
ENSRNOG00000027332	6	2465360	3666153	1.200793	8.43040713	5.208477225
ENSRNOG00000027376	4	145455195	145644559	0.189364	5.915772943	5.134660527
ENSRNOG00000027480	12	40690627	41199342	0.508715	28.83123001	26.62908351
ENSRNOG00000027489	12	51023679	51837234	0.813555	6.018451614	5.076358019
ENSRNOG00000027503	8	48710964	48990583	0.279619	21.22194008	16.34420238
ENSRNOG00000027513	3	176470398	176579278	0.10888	85.88329781	83.14315169
ENSRNOG00000027630	4	179150099	179730653	0.580554	7.49629259	5.381962637
ENSRNOG00000027707	6	103284297	104885835	1.601538	9.15210119	5.402737411
ENSRNOG00000027797	11	44517663	46441406	1.923743	13.32474504	8.883317657
ENSRNOG00000027799	8	118234037	119870529	1.636492	11.50659853	7.488297121
ENSRNOG00000027867	3	4990909	5654639	0.66373	33.4756077	28.80335817
ENSRNOG00000027949	20	32634523	32739519	0.104996	35.95202906	35.09280584
ENSRNOG00000027971	2	115492541	116463825	0.971284	23.28245031	18.54429446
ENSRNOG00000027997	11	43986797	45002430	1.015633	16.03335072	11.97823326
ENSRNOG00000028015	14	18748056	19230592	0.482536	6.5902195	5.03858187
ENSRNOG00000028025	2	211367187	212460274	1.093087	12.21381373	7.394527255
ENSRNOG00000028047	5	150167774	150251742	0.083968	22.95402533	18.56284177
ENSRNOG00000028062	13	69257726	70552271	1.294545	13.87410381	9.018749599

ENSRNOG00000028063	5	69856086	70727886	0.8718	8.619303126	5.040345647
ENSRNOG00000028100	12	1010907	2446477	1.43557	6.836059227	5.058641207
ENSRNOG00000028156	2	113364322	114115791	0.751469	8.664095536	5.000437858
ENSRNOG00000028185	5	35848880	36111783	0.262903	7.663812041	5.701300169
ENSRNOG00000028207	13	69436270	69906057	0.469787	6.081709363	5.028822655
ENSRNOG00000028216	11	36099521	37512091	1.41257	35.47611666	30.51928526
ENSRNOG00000028219	4	56804966	58807517	2.002551	10.86959031	5.911324331
ENSRNOG00000028238	11	36117948	37561796	1.443848	7.623612507	5.052428536
ENSRNOG00000028292	11	31002691	31973239	0.970548	6.208475213	5.015669596
ENSRNOG00000028320	19	30239405	30995156	0.755751	5.552307222	5.015893407
ENSRNOG00000028366	6	101168648	102510862	1.342214	7.882211298	5.289311341
ENSRNOG00000028403	2	28802364	29712593	0.910229	6.353623892	5.569908897
ENSRNOG00000028460	12	1766927	3219807	1.45288	18.64275636	13.9122156
ENSRNOG00000028461	16	6323358	8026947	1.703589	9.890452899	5.111009055
ENSRNOG00000028523	12	38813560	40690627	1.877067	9.513686996	5.012204857
ENSRNOG00000028534	14	76091523	76300840	0.209317	5.931299529	5.326919028
ENSRNOG00000028545	6	136666111	138151250	1.485139	6.491453538	5.474802928
ENSRNOG00000028632	4	167380409	167878904	0.498495	5.488351559	5.344100815
ENSRNOG00000028640	6	136805787	137254686	0.448899	5.939072751	5.262701621
ENSRNOG00000028649	19	17285383	18314200	1.028817	11.21995466	6.782461541
ENSRNOG00000028652	19	57605159	58840928	1.235769	18.00253964	13.08142646
ENSRNOG00000028668	3	114326559	114877380	0.550821	22.51511344	18.19914725
ENSRNOG00000028699	10	52812387	54007616	1.195229	13.7069678	8.784949219
ENSRNOG00000028701	3	2708048	3655610	0.947562	15.69897042	11.20656579
ENSRNOG00000028746	1	267312794	267611057	0.298263	18.43156964	13.90568471
ENSRNOG00000028752	13	48892265	49496376	0.604111	8.387601403	6.615579082
ENSRNOG00000028801	4	9791038	11033761	1.242723	31.14870036	27.56069482
ENSRNOG00000028812	10	103682531	104721301	1.03877	9.086006082	5.088725424
ENSRNOG00000028895	11	80635561	80804314	0.168753	29.82395414	26.58020952
ENSRNOG00000028941	2	24755994	25237634	0.48164	12.79892424	7.935991275
ENSRNOG00000029001	20	3764861	4153731	0.38887	9.993615286	5.107499448
ENSRNOG00000029012	10	52647676	53705644	1.057968	13.45336794	10.24775075
ENSRNOG00000029043	1	86902415	88888532	1.986117	10.28730946	5.443028657
ENSRNOG00000029071	2	246390911	247329708	0.938797	21.93421724	17.04629237
ENSRNOG00000029095	7	130076122	130876324	0.800202	7.000235222	5.07271009
ENSRNOG00000029128	7	123563330	123599390	0.03606	47.71929596	43.61782245
ENSRNOG00000029179	7	123501356	123852970	0.351614	7.009025956	5.013267828
ENSRNOG00000029212	2	17546468	18702639	1.156171	23.24449289	18.65221333
ENSRNOG00000029264	16	19364657	21164741	1.800084	9.836318108	5.039341993
ENSRNOG00000029316	15	57014488	58999637	1.985149	8.735024791	5.029626581
ENSRNOG00000029333	5	127240794	128776993	1.536199	13.66777417	8.766278079
ENSRNOG00000029336	1	79932195	81178891	1.246696	7.907689152	5.038425021
ENSRNOG00000029386	20	3185771	3677731	0.49196	44.94876283	42.7075946
ENSRNOG00000029508	3	160634219	161125511	0.491292	14.02931109	10.2865937
ENSRNOG00000029644	4	65885111	66571177	0.686066	36.74027914	32.47491831
ENSRNOG00000029682	20	4614737	5181088	0.566351	15.00699858	11.17029497

ENSRNOG00000029773	8	57181142	58349257	1.168115	6.382878398	5.092521293
ENSRNOG00000029813	12	6822067	6996502	0.174435	5.365459803	5.290501835
ENSRNOG00000029830	7	130066711	130443383	0.376672	6.839261687	5.480413364
ENSRNOG00000029841	13	31435140	32355912	0.920772	6.220727172	5.360764975
ENSRNOG00000029861	8	85599356	86175321	0.575965	20.77559751	15.89542439
ENSRNOG00000029871	6	104073927	105388409	1.314482	9.02639899	5.169771526
ENSRNOG00000029977	16	23864484	23974308	0.109824	26.94605315	26.471829
ENSRNOG00000029993	3	28270304	28815853	0.545549	16.25023261	11.86491125
ENSRNOG00000030016	8	39096826	40187920	1.091094	5.553301152	5.289945914
ENSRNOG00000030149	14	28269531	28342249	0.072718	5.183045223	5.183045223
ENSRNOG00000030154	5	133622763	134056288	0.433525	35.25187457	31.53737691
ENSRNOG00000030157	20	2460911	3677731	1.21682	5.968142058	5.024326945
ENSRNOG00000030216	14	6025517	7268350	1.242833	14.71721395	10.07548108
ENSRNOG00000030273	7	15107043	15391461	0.284418	5.781068861	5.001793879
ENSRNOG00000030316	7	51244250	51926363	0.682113	10.09363094	7.696650734
ENSRNOG00000030431	20	3804493	4832681	1.028188	12.3406504	7.663058731
ENSRNOG00000030537	10	108150768	109205146	1.054378	18.58054811	13.93493945
ENSRNOG00000030633	7	129474020	130465036	0.991016	5.621785674	5.190292233
ENSRNOG00000030712	20	5430087	5526405	0.096318	39.99291105	37.12296839
ENSRNOG00000030750	10	36297000	37362576	1.065576	5.377410506	5.004566564
ENSRNOG00000030862	5	14029096	14032167	0.003071	5.717546329	5.132580169
ENSRNOG00000030894	4	175474994	177018142	1.543148	10.99432958	6.134376623
ENSRNOG00000030904	2	104849699	106023129	1.17343	16.39548634	11.51547463
ENSRNOG00000031024	2	76688176	77288212	0.600036	11.09752083	6.888662653
ENSRNOG00000031032	8	90668913	91642239	0.973326	12.72710134	7.731111378
ENSRNOG00000031085	3	150615687	152535015	1.919328	9.333754974	5.367839526
ENSRNOG00000031090	20	3797950	5748819	1.950869	19.65568416	15.67299051
ENSRNOG00000031136	2	212008282	213836651	1.828369	10.83682995	5.962507466
ENSRNOG00000031171	20	4614737	5751889	1.137152	7.713897373	5.14077546
ENSRNOG00000031211	1	188729393	190143320	1.413927	37.86107293	33.16023413
ENSRNOG00000031213	10	101743070	102940426	1.197356	11.86581417	6.872142578
ENSRNOG00000031249	4	176417734	177018142	0.600408	35.75217528	31.86643908
ENSRNOG00000031263	6	6953709	7981842	1.028133	14.60811612	11.03482341
ENSRNOG00000031266	8	39096826	40429873	1.333047	14.37663776	9.586101875
ENSRNOG00000031440	6	66967277	67299380	0.332103	7.662658131	5.00908032
ENSRNOG00000031478	3	161812224	162244520	0.432296	33.04134595	29.44769006
ENSRNOG00000031599	13	88390938	88438290	0.047352	5.64501909	5.449525867
ENSRNOG00000031607	20	4581345	5581788	1.000443	21.01588001	16.42515161
ENSRNOG00000031689	20	1216735	3185771	1.969036	10.03397604	5.091198602
ENSRNOG00000031707	4	157068267	158757381	1.689114	11.07893903	6.277797402
ENSRNOG00000031709	4	180766674	182267291	1.500617	8.42635719	5.819638054
ENSRNOG00000031916	7	2582982	3314897	0.731915	13.21798913	8.767934389
ENSRNOG00000031930	7	141926263	142313902	0.387639	9.087830272	5.151129887
ENSRNOG00000031993	7	2582982	3314897	0.731915	27.21224484	23.27629411
ENSRNOG00000031997	2	252398863	253133700	0.734837	10.0813353	5.264667435
ENSRNOG00000032018	5	150309463	150381548	0.072085	6.47604249	5.725787319

ENSRNOG00000032192	16	49223450	49592577	0.369127	5.527181576	5.242718647
ENSRNOG00000032238	8	127711892	127814906	0.103014	5.219542437	5.037976968
ENSRNOG00000032246	1	189411463	190484547	1.073084	6.66263335	5.497235597
ENSRNOG00000032293	1	141106866	142073181	0.966315	6.603215782	5.065642286
ENSRNOG00000032311	7	129578120	130876324	1.298204	13.79465196	9.095246147
ENSRNOG00000032327	11	67516534	68788486	1.271952	10.54236357	5.664711651
ENSRNOG00000032374	8	102643805	103411345	0.76754	8.551919512	5.046945999
ENSRNOG00000032394	7	129488345	130987539	1.499194	11.99495352	7.435278955
ENSRNOG00000032429	7	10903818	12694259	1.790441	5.762830096	5.250161437
ENSRNOG00000032436	8	81470734	83306168	1.835434	15.08527699	10.39081232
ENSRNOG00000032487	X	44438893	45778379	1.339486	16.16635118	11.89372792
ENSRNOG00000032508	6	107403899	108475440	1.071541	23.49942061	19.86333857
ENSRNOG00000032522	X	14252855	15213205	0.96035	7.513117506	5.187942806
ENSRNOG00000032560	12	10674778	11766398	1.09162	10.2214152	5.353943331
ENSRNOG00000032625	1	80914347	81149711	0.235364	6.338068074	5.110275092
ENSRNOG00000032629	X	138961272	139728756	0.767484	6.763855663	6.177106543
ENSRNOG00000032656	3	158561871	159298607	0.736736	29.30836271	24.81319838
ENSRNOG00000032664	20	3804493	4115227	0.310734	8.208856872	6.624383892
ENSRNOG00000032705	12	24252339	24409567	0.157228	19.50981167	16.01433027
ENSRNOG00000032708	20	3797950	4585573	0.787623	13.17033484	8.602126311
ENSRNOG00000032720	6	87242899	88762574	1.519675	7.788820754	5.185450181
ENSRNOG00000032798	1	135330841	136116532	0.785691	8.428277977	5.233677658
ENSRNOG00000032805	1	83246368	84920956	1.674588	15.45742875	10.82280076
ENSRNOG00000032812	13	107808188	109191156	1.382968	12.08910497	7.183867005
ENSRNOG00000032813	20	3185771	3779154	0.593383	15.1553885	10.36785671
ENSRNOG00000032846	7	126123951	127622626	1.498675	8.915741335	5.162140838
ENSRNOG00000032871	7	129949665	130465036	0.515371	45.46721051	42.16016496
ENSRNOG00000032895	7	14433818	15896660	1.462842	10.66084523	5.715158732
ENSRNOG00000032942	20	4627127	5181457	0.55433	26.25669158	21.81661362
ENSRNOG00000032959	2	243073852	244103347	1.029495	21.43633153	16.43701334
ENSRNOG00000033017	12	21205086	22100284	0.895198	12.21859809	7.514962602
ENSRNOG00000033026	8	118718139	119474278	0.756139	24.60389098	20.37985732
ENSRNOG00000033064	2	17546468	19026664	1.480196	8.905142764	5.295436944
ENSRNOG00000033133	19	662084	999245	0.337161	5.394603656	5.09229548
ENSRNOG00000033164	1	83450768	84172381	0.721613	6.175021279	5.244145176
ENSRNOG00000033192	2	56135045	56167384	0.032339	5.777704381	5.620955591
ENSRNOG00000033220	12	40256781	41649896	1.393115	10.56257702	5.686395002
ENSRNOG00000033261	15	17425865	18399488	0.973623	6.64618297	5.023215046
ENSRNOG00000033262	7	11464474	13236883	1.772409	12.38203798	7.554074513
ENSRNOG00000033348	3	113314932	115286265	1.971333	10.15173675	5.176678509
ENSRNOG00000033389	20	13788834	14217124	0.42829	20.72774375	16.05976671
ENSRNOG00000033402	9	26666866	28083053	1.416187	12.88737759	7.898398309
ENSRNOG00000033411	12	9166533	10203494	1.036961	8.713700046	5.030079387
ENSRNOG00000033415	5	77003567	77050431	0.046864	6.098735721	5.782969762
ENSRNOG00000033529	2	215522112	216563048	1.040936	18.46734961	13.56802713
ENSRNOG00000033564	7	12076150	12898142	0.821992	6.176255665	5.009796013

ENSRNOG00000033570	7	125025015	126772646	1.747631	7.35893909	5.051342804
ENSRNOG00000033572	7	97817306	99089086	1.27178	18.98492116	14.01095681
ENSRNOG00000033593	5	127909239	129787997	1.878758	9.43187551	5.680600232
ENSRNOG00000033623	11	71568004	72725644	1.15764	12.82219897	8.341255965
ENSRNOG00000033693	2	30236113	30961333	0.72522	35.25242838	30.57941888
ENSRNOG00000033697	8	1666135	3483596	1.817461	6.737795969	5.008121831
ENSRNOG00000033763	17	30432116	30659418	0.227302	5.989731801	5.080913268
ENSRNOG00000033791	7	11750438	12212364	0.461926	5.316161233	5.14311636
ENSRNOG00000033809	8	118714730	119462054	0.747324	38.45987011	33.89689578
ENSRNOG00000033921	8	119390583	119474278	0.083695	5.403370003	5.403370003
ENSRNOG00000033923	9	64413480	65646311	1.232831	38.84623362	34.00488414
ENSRNOG00000034038	1	203243528	204180412	0.936884	10.455103	5.952698785
ENSRNOG00000034078	1	273463663	274840613	1.37695	11.96744472	7.036502616
ENSRNOG00000034139	7	60441506	60567121	0.125615	54.39210691	52.44496814
ENSRNOG00000034200	14	41407090	42110086	0.702996	7.715647082	5.164836148
ENSRNOG00000034203	6	75290990	76363747	1.072757	24.25962043	19.48640533
ENSRNOG00000034228	4	173438536	174184428	0.745892	27.83681442	23.13254268
ENSRNOG00000034242	5	58155695	59269303	1.113608	6.805894096	5.55459889
ENSRNOG00000036631	1	226823636	227001468	0.177832	7.025232706	5.911538336
ENSRNOG00000036645	1	213123936	214374168	1.250232	5.400015975	5.269836294
ENSRNOG00000036658	10	109645212	110853210	1.207998	6.880751117	5.268306511
ENSRNOG00000036668	10	109398814	110580792	1.181978	6.281365361	5.189433139
ENSRNOG00000036673	10	109258961	110580792	1.321831	16.13177543	11.29021764
ENSRNOG00000036686	10	108859284	109637351	0.778067	5.13088285	5.064521464
ENSRNOG00000036691	10	108736322	110346200	1.609878	17.9329522	13.88121052
ENSRNOG00000036692	10	108736322	110346200	1.609878	11.87815998	6.95829445
ENSRNOG00000036693	10	108736322	109786203	1.049881	16.64728491	14.0151983
ENSRNOG00000036703	1	198740447	199637207	0.89676	5.750121281	5.091551636
ENSRNOG00000036719	3	176101351	177336004	1.234653	43.54787126	40.98042779
ENSRNOG00000036798	10	90011566	90343296	0.33173	25.00408246	20.27565309
ENSRNOG00000036802	3	154794363	155632976	0.838613	8.735730481	5.009276107
ENSRNOG00000036917	4	182892053	184220441	1.328388	12.69449233	7.855691362
ENSRNOG00000036934	3	145656938	147098973	1.442035	10.10603937	7.022863425
ENSRNOG00000036942	5	167039612	168654746	1.615134	12.15890157	7.573890901
ENSRNOG00000036960	4	176140716	177018142	0.877426	28.01138034	23.43032055
ENSRNOG00000036984	4	176417734	177018142	0.600408	42.0165584	37.50225469
ENSRNOG00000037060	7	129949665	130465036	0.515371	15.77235376	12.49137154
ENSRNOG00000037160	3	114117345	115481091	1.363746	21.49133466	17.02664445
ENSRNOG00000037203	3	113072841	114023842	0.951001	6.252514188	5.027996782
ENSRNOG00000037206	4	152532985	152928835	0.39585	30.76822736	25.93391403
ENSRNOG00000037348	1	98072786	99634775	1.561989	9.377492941	5.067447378
ENSRNOG00000037374	7	116503168	116645245	0.142077	23.01656268	18.70270352
ENSRNOG00000037402	9	99404919	99959245	0.554326	16.96105289	11.97727481
ENSRNOG00000037426	12	51865511	52714753	0.849242	8.074016153	5.083716091
ENSRNOG00000037430	12	51640947	52714753	1.073806	8.995090355	5.033889308
ENSRNOG00000037476	12	52104339	52293410	0.189071	26.62060583	25.43435289

ENSRNOG00000037518	5	137125013	137719476	0.594463	12.48175473	7.821340565
ENSRNOG00000037595	5	134942693	135602449	0.659756	9.490839599	5.076066612
ENSRNOG00000037628	20	49126410	49359105	0.232695	5.333962256	5.139451121
ENSRNOG00000037659	8	85599356	85778413	0.179057	6.167140531	5.023335728
ENSRNOG00000037753	16	89340610	90632075	1.291465	9.555941965	5.150026812
ENSRNOG00000037801	12	39777512	40102671	0.325159	5.363070378	5.156745336
ENSRNOG00000037815	12	40475512	41133057	0.657545	33.73090881	31.56978121
ENSRNOG00000037850	13	102623290	102986420	0.36313	18.85132759	15.17119312
ENSRNOG00000037851	11	88224959	90137636	1.912677	6.294011422	5.006266157
ENSRNOG00000037871	4	116479261	118107249	1.627988	11.83592378	7.680516732
ENSRNOG00000037928	13	99148890	99840353	0.691463	10.99665343	6.548842951
ENSRNOG00000037967	11	87464568	88393590	0.929022	6.779654127	5.140935054
ENSRNOG00000037998	6	111451722	112072669	0.620947	10.49866511	5.567328487
ENSRNOG00000038025	17	78996409	79407673	0.411264	13.21700144	8.410682415
ENSRNOG00000038102	4	100664942	101219420	0.554478	20.2771215	15.35642478
ENSRNOG00000038160	11	84132331	84710911	0.57858	13.59937621	8.621963764
ENSRNOG00000038166	6	107306312	108475440	1.169128	17.96980466	13.72381528
ENSRNOG00000038193	19	56433026	57154396	0.72137	7.070600153	5.100184659
ENSRNOG00000038218	2	139509963	141162003	1.65204	9.409523928	5.007521262
ENSRNOG00000038784	18	57773497	59462813	1.689316	5.481460924	5.35251597
ENSRNOG00000038825	2	92734727	94274369	1.539642	13.55159871	8.596611153
ENSRNOG00000038868	11	65864882	67394521	1.529639	7.625961557	5.063189685
ENSRNOG00000038883	20	7284029	8075954	0.791925	25.63667477	21.32604602
ENSRNOG00000038894	10	31731541	32241608	0.510067	26.98330685	22.55496078
ENSRNOG00000038999	20	5427853	5748819	0.320966	21.09619936	16.42243818
ENSRNOG00000039024	11	61174677	61492655	0.317978	16.07465432	11.23660969
ENSRNOG00000039284	15	32742418	33992205	1.249787	10.49638221	5.697314392
ENSRNOG00000039297	15	32366565	33992205	1.62564	15.15899798	10.30921489
ENSRNOG00000039315	3	11477870	11864846	0.386976	20.85065029	15.90985966
ENSRNOG00000039336	5	58936887	59889700	0.952813	5.620608056	5.087180065
ENSRNOG00000039379	17	21385302	21748084	0.362782	30.66907323	27.53524231
ENSRNOG00000039528	16	18801577	20029636	1.228059	28.75310604	25.91822877
ENSRNOG00000039530	5	57175435	59029956	1.854521	15.00940221	10.2105369
ENSRNOG00000039571	X	14792540	15576044	0.783504	24.43326066	21.90943826
ENSRNOG00000039656	10	13399207	14179764	0.780557	24.05678412	19.20258633
ENSRNOG00000039666	X	13198426	15213205	2.014779	6.605094288	5.057679929
ENSRNOG00000039668	11	43986797	45543272	1.556475	11.47749534	6.548548611
ENSRNOG00000039678	11	43986797	45002430	1.015633	16.33943066	11.34584437
ENSRNOG00000039744	20	3892983	5521353	1.62837	33.27348851	29.10406568
ENSRNOG00000039850	11	34022210	35464439	1.442229	7.93717632	6.63101108
ENSRNOG00000039871	15	12766761	13801439	1.034678	16.49663872	11.82837639
ENSRNOG00000039891	19	10443232	11282140	0.838908	6.982628769	5.008508254
ENSRNOG00000039906	3	4224600	5967320	1.74272	16.61657796	12.19494057
ENSRNOG00000039969	18	11980815	12804510	0.823695	10.91410723	5.938891529
ENSRNOG00000039994	X	122869305	123918862	1.049557	7.677156914	5.39861375
ENSRNOG00000040040	5	24244085	24689503	0.445418	34.47283586	29.63466711

ENSRNOG00000040052	20	1307586	2565909	1.258323	22.29182443	18.27000566
ENSRNOG00000040121	10	1327035	2690784	1.363749	27.55602415	22.74303187
ENSRNOG00000040188	3	3310806	3520131	0.209325	54.10375948	49.93760118
ENSRNOG00000040195	9	4518211	5881791	1.36358	11.21475404	8.136178875
ENSRNOG00000040201	2	18992158	20705428	1.71327	24.10670071	19.41913323
ENSRNOG00000040215	9	4518211	5550350	1.032139	6.224506924	5.031035244
ENSRNOG00000040289	5	4542835	5913576	1.370741	7.107892969	5.012852496
ENSRNOG00000040297	2	1967070	3998843	2.031773	9.408586975	6.096524574
ENSRNOG00000042062	5	172825006	173358345	0.533339	6.634675732	5.701501935
ENSRNOG00000042111	9	4462490	5115717	0.653227	18.15008472	14.14762789
ENSRNOG00000042118	2	57135731	57720760	0.585029	6.244714344	5.443187666
ENSRNOG00000042237	16	20936532	21992197	1.055665	6.162362177	5.006365839
ENSRNOG00000042251	10	103682531	104433643	0.751112	15.34991137	12.47397344
ENSRNOG00000042253	15	3605208	4496497	0.891289	57.64488197	52.83582347
ENSRNOG00000042276	X	29495180	29775067	0.279887	18.40075338	15.78277286
ENSRNOG00000042283	2	121899139	123046183	1.147044	22.03937656	17.08714514
ENSRNOG00000042332	2	259256597	261504922	2.248325	17.36899695	12.38948689
ENSRNOG00000042353	19	43009812	44339182	1.32937	8.199696366	5.088429019
ENSRNOG00000042389	2	250899587	252406145	1.506558	12.48495583	7.488315438
ENSRNOG00000042404	15	58706421	59324109	0.617688	8.384691585	5.074690042
ENSRNOG00000042426	16	49198476	49998977	0.800501	11.55891422	6.752433245
ENSRNOG00000042445	10	103466474	105359212	1.892738	7.775459466	5.002101193
ENSRNOG00000042451	13	52881716	53157055	0.275339	21.38243464	19.05130775
ENSRNOG00000042468	9	14432784	15256105	0.823321	7.828314131	5.184162577
ENSRNOG00000042482	4	145455195	145782121	0.326926	6.960348748	5.39310504
ENSRNOG00000042496	7	14433818	15491246	1.057428	27.26352035	22.8853734
ENSRNOG00000042543	5	76484329	77489869	1.00554	8.550950926	5.696401279
ENSRNOG00000042556	3	3297598	3797583	0.499985	6.623108559	5.375240167
ENSRNOG00000042607	12	38567842	39461392	0.89355	6.239770577	5.113657437
ENSRNOG00000042620	1	260522692	261467225	0.944533	30.64101225	28.25973025
ENSRNOG00000042668	7	63235497	63530015	0.294518	5.892210202	5.669875565
ENSRNOG00000042714	14	22355762	23098076	0.742314	34.06792444	30.90640941
ENSRNOG00000042720	10	14825303	15826280	1.000977	10.76029979	5.897018719
ENSRNOG00000042758	4	21795563	22209181	0.413618	5.542240707	5.500023312
ENSRNOG00000042771	7	119106800	119308919	0.202119	71.72233185	70.71307244
ENSRNOG00000042826	1	60417015	61818863	1.401848	6.956642224	5.007276817
ENSRNOG00000042884	2	200133812	201586583	1.452771	8.169921028	5.23146272
ENSRNOG00000042901	13	56633984	57138419	0.504435	7.884843187	5.016904875
ENSRNOG00000042905	20	3803771	3896265	0.092494	14.9828268	11.4163797
ENSRNOG00000042912	10	81977999	82742463	0.764464	25.31638405	22.23170988
ENSRNOG00000042929	13	89604113	89618822	0.014709	5.519024288	5.504074937
ENSRNOG00000042932	6	21254260	22144525	0.890265	7.497973183	5.124962192
ENSRNOG00000042961	9	52189865	52910452	0.720587	5.248159226	5.143059929
ENSRNOG00000042978	7	76341071	76894305	0.553234	24.73745968	19.78129096
ENSRNOG00000043145	19	42481285	42596106	0.114821	43.90791688	39.92362724
ENSRNOG00000043151	5	103502076	103902860	0.400784	5.441570538	5.122266293

ENSRNOG00000043192	17	81165094	81698537	0.533443	7.112278655	5.404928496
ENSRNOG00000043204	3	80028136	81569119	1.540983	11.71652141	9.489311687
ENSRNOG00000043233	7	14433818	15909399	1.475581	8.261166589	5.011641486
ENSRNOG00000043286	19	10261716	10904126	0.64241	14.12956782	9.330204175
ENSRNOG00000043288	17	21385302	22136145	0.750843	13.66545056	8.835378957
ENSRNOG00000043289	7	10118517	11768676	1.650159	7.170162128	5.206583858
ENSRNOG00000043323	3	1283678	2287178	1.0035	11.11879762	6.397636158
ENSRNOG00000043331	5	172825006	173283289	0.458283	24.00769405	19.07725363
ENSRNOG00000043345	11	71782803	72484549	0.701746	6.409562677	5.071027142
ENSRNOG00000043350	17	19265276	19333568	0.068292	7.885679437	7.400751651
ENSRNOG00000043374	13	55186549	56487438	1.300889	12.86794547	8.352257422
ENSRNOG00000043451	14	6501475	7673132	1.171657	15.01494072	10.07288799
ENSRNOG00000045524	7	10656259	12277134	1.620875	5.738827601	5.112551638
ENSRNOG00000045558	13	112923637	113663891	0.740254	5.603852864	5.197089947
ENSRNOG00000045626	19	49379547	50522380	1.142833	7.492881912	5.068215276
ENSRNOG00000045668	11	30768519	32072272	1.303753	25.80861595	20.86754341
ENSRNOG00000045814	2	165473046	166702338	1.229292	5.397099819	5.034985839
ENSRNOG00000045829	3	109786224	110808453	1.022229	14.77808881	10.61047531
ENSRNOG00000045838	1	261717489	261987692	0.270203	55.18338646	51.96298668
ENSRNOG00000045840	4	169993567	170919797	0.92623	25.71763513	20.76285851
ENSRNOG00000045913	5	170938483	172567835	1.629352	7.265661273	5.290736962
ENSRNOG00000045924	20	3234049	3779154	0.545105	14.24531598	11.02497122
ENSRNOG00000045926	10	109169897	110580792	1.410895	16.36663191	11.68114673
ENSRNOG00000045989	10	15136730	15827171	0.690441	20.55270057	15.91582941
ENSRNOG00000046005	1	263976327	264259864	0.283537	7.39468995	5.101986397
ENSRNOG00000046031	20	4212089	5678205	1.466116	9.458255596	5.069022728
ENSRNOG00000046171	12	23643095	24605991	0.962896	8.312909377	5.397574298
ENSRNOG00000046184	12	21225283	22102480	0.877197	13.23685093	8.585627045
ENSRNOG00000046257	8	127449476	127719398	0.269922	6.094611297	5.027255314
ENSRNOG00000046330	10	35870466	35950955	0.080489	7.036234021	6.637617279
ENSRNOG00000046345	4	119623221	120574413	0.951192	7.420715479	5.207735984
ENSRNOG00000046357	2	243153125	244142378	0.989253	31.17848729	26.22843525
ENSRNOG00000046386	9	99778829	100048770	0.269941	21.31961039	16.99246155
ENSRNOG00000046426	9	19971902	20114027	0.142125	7.006826672	5.217331613
ENSRNOG00000046445	13	110181827	110914212	0.732385	5.381118758	5.343044842
ENSRNOG00000046460	13	108723907	110420885	1.696978	20.4293898	16.91672552
ENSRNOG00000046493	10	83904890	84966186	1.061296	22.23303797	17.95239002
ENSRNOG00000046530	1	260231020	261615619	1.384599	8.470838158	5.054997824
ENSRNOG00000046540	14	21388242	23094098	1.705856	33.6633382	28.67251981
ENSRNOG00000046630	8	114422584	115258524	0.83594	7.803101921	5.272822843
ENSRNOG00000046639	10	58795608	59962335	1.166727	29.81100178	26.27027999
ENSRNOG00000046848	8	103295718	104188408	0.89269	7.073767563	5.02617795
ENSRNOG00000046890	10	97528908	98684077	1.155169	6.965770605	5.080313133
ENSRNOG00000046946	10	110270973	111084491	0.813518	21.45998733	16.63592806
ENSRNOG00000046949	3	163089477	164403097	1.31362	22.22530055	17.40335159
ENSRNOG00000046958	3	3821980	5383168	1.561188	11.93273175	7.095285079

ENSRNOG00000046980	10	10463276	11324727	0.861451	8.768391391	5.429890136
ENSRNOG00000046983	1	6969827	8296070	1.326243	11.98118892	7.129386054
ENSRNOG00000047023	4	122592100	123536248	0.944148	7.991298729	5.096846304
ENSRNOG00000047028	3	150615687	151522448	0.906761	21.52728857	17.74929908
ENSRNOG00000047076	12	40256781	41512974	1.256193	5.924723987	5.056102009
ENSRNOG00000047079	12	21205086	21225283	0.020197	5.709380326	5.107564329
ENSRNOG00000047115	6	104420890	105533740	1.11285	6.939545325	5.092079834
ENSRNOG00000047123	13	89877010	90751063	0.874053	15.63913508	10.64734479
ENSRNOG00000047137	2	33062444	33142525	0.080081	5.608594247	5.143812209
ENSRNOG00000047171	20	8200326	8944372	0.744046	26.44216697	21.95613865
ENSRNOG00000047225	8	117220846	118816684	1.595838	6.326795509	5.265676707
ENSRNOG00000047309	4	166786620	168161534	1.374914	13.63457087	8.703778883
ENSRNOG00000047319	4	182920319	182998824	0.078505	5.312792736	5.30281251
ENSRNOG00000047339	X	68419591	70195607	1.776016	9.611509882	6.212008632
ENSRNOG00000047349	1	226783240	228277819	1.494579	10.79498638	5.849952817
ENSRNOG00000047369	9	4476048	5112258	0.63621	20.54798249	17.82606843
ENSRNOG00000047436	18	3247345	4756600	1.509255	7.791891905	5.013572175
ENSRNOG00000047453	4	29622461	29789439	0.166978	6.432934355	5.826633366
ENSRNOG00000047481	13	49691989	50530503	0.838514	6.667696412	5.388254262
ENSRNOG00000047503	8	50039390	51305167	1.265777	6.380285056	5.029852929
ENSRNOG00000047507	4	116906050	118103366	1.197316	8.481224646	5.050033165
ENSRNOG00000047545	1	273854904	274840613	0.985709	15.68277039	11.50377181
ENSRNOG00000047635	4	67037258	67909571	0.872313	10.64913779	5.742961264
ENSRNOG00000047656	10	108411994	109319018	0.907024	8.936698533	5.040504105
ENSRNOG00000047741	5	154655412	155510280	0.854868	15.97661769	11.07461836
ENSRNOG00000047745	12	10222922	11685660	1.462738	14.11177463	9.317499263
ENSRNOG00000047752	17	8911332	10649513	1.738181	11.6817844	7.169222833
ENSRNOG00000047796	17	8689064	9957390	1.268326	17.65553295	13.1759212
ENSRNOG00000047799	8	81342032	83034109	1.692077	9.971781562	5.03545372
ENSRNOG00000047874	3	172263412	172830285	0.566873	24.787516	21.19949278
ENSRNOG00000047898	2	198193182	198988679	0.795497	14.14339656	9.818158664
ENSRNOG00000047941	6	25486805	27026614	1.539809	43.74622672	38.85448382
ENSRNOG00000047945	1	258018650	259334449	1.315799	7.941629314	5.833915824
ENSRNOG00000047967	5	159527493	160750828	1.223335	12.72776135	7.735360675
ENSRNOG00000048043	2	25147171	26670631	1.52346	7.726347173	5.36101929
ENSRNOG00000048050	12	38338399	39777512	1.439113	12.66053405	7.816496908
ENSRNOG00000048053	10	70591035	70763465	0.17243	5.515034453	5.085731026
ENSRNOG00000048114	17	75009816	76724930	1.715114	10.34791631	5.390983423
ENSRNOG00000048121	10	1110007	3000575	1.890568	12.85263131	8.137639884
ENSRNOG00000048166	1	260231020	261978347	1.747327	6.141588093	5.00990144
ENSRNOG00000048168	12	51865511	52714753	0.849242	7.60312175	5.001482224
ENSRNOG00000048172	10	109322966	110580792	1.257826	19.38302881	14.43155727
ENSRNOG00000048190	1	57257714	58626387	1.368673	8.177371985	5.0808266
ENSRNOG00000048195	15	3469605	4508284	1.038679	8.645617328	5.874533034
ENSRNOG00000048275	1	212643601	214313215	1.669614	5.952684736	5.041853614
ENSRNOG00000048371	4	9791038	11033761	1.242723	19.64790161	15.39744511

ENSRNOG00000048397	1	198434590	199566119	1.131529	41.82536959	38.56388217
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ENSRNOG00000048472	16	20770620	21707286	0.936666	15.0466246	13.13967765
ENSRNOG00000048553	5	147410121	148052425	0.642304	17.38276851	12.52859342
ENSRNOG00000048567	9	99961008	100417616	0.456608	8.621859984	5.200764217
ENSRNOG00000048576	17	32443231	32934437	0.491206	34.70197468	33.67052141
ENSRNOG00000048577	7	14842432	15946097	1.103665	11.92873571	6.947288051
ENSRNOG00000048578	15	31532060	32779129	1.247069	7.840724847	5.446399729
ENSRNOG00000048623	9	15333842	16959718	1.625876	11.12675389	6.616628587
ENSRNOG00000048712	10	108634655	109877518	1.242863	12.02372545	7.837990433
ENSRNOG00000048771	10	104750744	104998444	0.2477	25.56410454	22.73886624
ENSRNOG00000048782	4	122378089	124035321	1.657232	7.490851268	5.872536852
ENSRNOG00000048838	10	90591824	91258366	0.666542	6.084970403	5.156166596
ENSRNOG00000048864	7	9694608	11464474	1.769866	8.370266729	5.103440108
ENSRNOG00000048870	3	11477870	11864846	0.386976	33.01697789	28.50725488
ENSRNOG00000048876	5	147461252	148299038	0.837786	10.04253165	5.218678525
ENSRNOG00000048881	12	20616299	21225283	0.608984	16.59234679	13.03943987
ENSRNOG00000048898	12	10230675	10385900	0.155225	25.15135938	22.08157142
ENSRNOG00000048914	3	13717957	14949900	1.231943	11.21445613	7.187352226
ENSRNOG00000048929	20	4451899	4574816	0.122917	5.643903441	5.348217379
ENSRNOG00000048951	20	2434997	3675590	1.240593	29.82007884	25.83601102
ENSRNOG00000048969	4	2307893	3352178	1.044285	8.753405056	5.648685044
ENSRNOG00000049019	19	43147054	44339182	1.192128	7.27472484	5.076570926
ENSRNOG00000049034	3	11477870	12381436	0.903566	23.69796772	20.26408757
ENSRNOG00000049056	3	10677411	12381436	1.704025	12.62464306	8.174550387
ENSRNOG00000049088	6	33972242	35144983	1.172741	6.226869355	5.030073382
ENSRNOG00000049161	1	251879392	252284053	0.404661	6.416790956	5.196624925
ENSRNOG00000049223	6	110349305	111334107	0.984802	15.28898078	10.41829229
ENSRNOG00000049229	12	8093105	9986088	1.892983	10.23734823	5.256741044
ENSRNOG00000049235	10	108723267	110327931	1.604664	8.222690652	5.026327792
ENSRNOG00000049281	2	187545902	188891036	1.345134	7.689324489	5.216148899
ENSRNOG00000049315	6	142134440	144031774	1.897334	7.783800813	5.677605599
ENSRNOG00000049326	5	147014334	148271277	1.256943	8.342476869	5.273598024
ENSRNOG00000049388	X	131427285	132619020	1.191735	16.77675699	11.87673156
ENSRNOG00000049430	6	25631681	27568916	1.937235	17.03933341	12.54990449
ENSRNOG00000049452	17	83814828	84474962	0.660134	21.32512107	18.20876925
ENSRNOG00000049464	1	258854894	259332407	0.477513	27.26685164	22.90041442
ENSRNOG00000049471	13	35261428	37167549	1.906121	10.98644315	6.169992636
ENSRNOG00000049537	13	77360710	78763150	1.40244	6.895623095	5.109770671
ENSRNOG00000049590	20	649245	2300321	1.651076	9.164656377	5.049810567
ENSRNOG00000049605	1	79599485	81024145	1.42466	6.181117926	5.025542741
ENSRNOG00000049615	6	29635643	29712712	0.077069	7.67407469	5.103004697
ENSRNOG00000049771	20	13853293	14117724	0.264431	26.2334736	22.53113619
ENSRNOG00000049780	4	22067952	23305464	1.237512	11.0725928	6.503383115
ENSRNOG00000049828	14	981292	2300817	1.319525	8.300633294	5.393629568
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ENSRNOG00000049994	2	256707963	257176750	0.468787	15.40998903	10.47431733
ENSRNOG00000050128	12	20446785	22102480	1.655695	8.324549633	5.407359818
ENSRNOG00000050143	6	141921315	142447925	0.52661	5.428390478	5.044697194
ENSRNOG00000050163	13	99250831	99375155	0.124324	5.316862966	5.04169662
ENSRNOG00000050169	12	1783840	2273744	0.489904	11.62166222	6.820174537
ENSRNOG00000050183	20	3797872	5593673	1.795801	18.9774745	14.22165337
ENSRNOG00000050205	10	106785130	107070064	0.284934	27.50770955	24.8196095
ENSRNOG00000050210	20	429561	612395	0.182834	10.56609489	7.433592893
ENSRNOG00000050233	20	3087144	4435353	1.348209	6.406779477	5.044745775
ENSRNOG00000050315	10	109176190	110580792	1.404602	7.395998736	5.047760399
ENSRNOG00000050347	10	88758926	90288686	1.52976	7.941446127	5.098605393
ENSRNOG00000050360	12	9166533	10193153	1.02662	11.65955054	6.692526088
ENSRNOG00000050419	7	70146817	71089920	0.943103	7.084044933	5.509119332
ENSRNOG00000050425	20	44160195	45673911	1.513716	13.25360871	8.263006359
ENSRNOG00000050499	5	76368440	76422990	0.05455	5.777852171	5.696128923
ENSRNOG00000050521	9	14432784	14936753	0.503969	21.54253323	16.60897021
ENSRNOG00000050570	6	25571702	27362384	1.790682	10.05018045	5.511747303
ENSRNOG00000050582	7	118071023	118855234	0.784211	6.261871822	5.517311215
ENSRNOG00000050595	5	76451491	78771041	2.31955	9.392621521	5.410757393
ENSRNOG00000050624	1	127382008	128583557	1.201549	19.102565	14.34522212
ENSRNOG00000050670	5	117693285	117874963	0.181678	5.820609384	5.198267177
ENSRNOG00000050682	5	76368440	78345006	1.976566	8.099795703	5.012185858
ENSRNOG00000050729	3	145004081	146722268	1.718187	15.52499435	12.17101903
ENSRNOG00000050780	3	11181094	12519791	1.338697	7.445912269	5.027474697
ENSRNOG00000050819	10	106785130	107070064	0.284934	18.71336744	15.24411696
ENSRNOG00000050828	1	198630528	199722541	1.092013	15.08603737	10.70718236
ENSRNOG00000050949	18	3413169	4121796	0.708627	5.142261905	5.091952318
ENSRNOG00000050955	10	1327035	2483484	1.156449	34.14101554	30.25773667
ENSRNOG00000050968	15	18698876	18800841	0.101965	5.114660965	5.05570761
ENSRNOG00000051079	10	69662119	70591035	0.928916	25.5862668	21.06796584
ENSRNOG00000051100	13	77953884	78578833	0.624949	5.975769653	5.071946579
ENSRNOG00000051112	5	76618206	78555780	1.937574	10.59447649	5.910572294
ENSRNOG00000051116	5	76952467	78859068	1.906601	10.03233218	5.09208898
ENSRNOG00000051118	5	76848600	78450398	1.601798	7.806300052	5.272276041
ENSRNOG00000051166	13	74414312	75997979	1.583667	7.984620174	5.345063777
ENSRNOG00000051216	X	65092666	66279910	1.187244	5.744445651	5.048622706
ENSRNOG00000051235	20	3577247	5176859	1.599612	7.084430604	5.024907579
ENSRNOG00000051291	1	170425360	171118963	0.693603	7.57017685	5.260381022
ENSRNOG00000051307	10	88620594	89835648	1.215054	8.75188436	5.034734924
ENSRNOG00000051528	9	113415770	115081078	1.665308	6.584699534	5.061450994
ENSRNOG00000051563	7	12223863	13732846	1.508983	17.71501553	13.74285099
ENSRNOG00000051569	18	38620730	39997813	1.377083	6.363944814	5.054958714
ENSRNOG00000051650	6	42476380	44399967	1.923587	18.08138007	13.36658957
ENSRNOG00000051682	2	20374201	20864867	0.490666	32.07243188	27.55403139

ENSRNOG00000051688	16	9589615	10838038	1.248423	7.112500701	5.028626571
ENSRNOG00000051691	10	86523948	87522678	0.99873	8.840580616	5.059285954
ENSRNOG00000051699	12	12842997	13792724	0.949727	15.89851252	10.93541037
ENSRNOG00000051706	15	26782815	28265579	1.482764	12.92644834	8.398959188
ENSRNOG00000051743	19	40872650	41842403	0.969753	19.739977	15.34880663
ENSRNOG00000051753	14	5559540	6181012	0.621472	14.00761232	10.68563396
ENSRNOG00000051792	8	54641803	55885183	1.24338	6.81039567	5.169926708
ENSRNOG00000051819	19	49351441	50193012	0.841571	8.936715664	5.012710761
ENSRNOG00000051835	7	139142167	140826404	1.684237	12.06568764	7.453494845
ENSRNOG00000051837	14	46194436	46917835	0.723399	8.076702591	6.437525173
ENSRNOG00000051850	2	211479367	212329924	0.850557	9.446420275	5.167945608
ENSRNOG00000051888	2	26842756	28250104	1.407348	9.791488762	5.003813211
ENSRNOG00000051912	5	64675176	64812869	0.137693	32.03532189	28.00526119
ENSRNOG00000051938	1	53806990	53896965	0.089975	7.202568687	5.781713749
ENSRNOG00000051960	20	26461428	27595268	1.13384	35.20324417	31.08686865
ENSRNOG00000051990	4	149846567	150589137	0.74257	8.917816297	5.218476037
ENSRNOG00000052064	7	125379567	126104934	0.725367	6.048787144	5.449721236
ENSRNOG00000052122	20	3185771	3779154	0.593383	16.06926326	11.18127941
ENSRNOG00000052130	X	136812851	138651073	1.838222	8.993984028	5.744886428
ENSRNOG00000052162	10	77844798	78569675	0.724877	17.17006541	12.32695667
ENSRNOG00000052167	2	30941041	31199195	0.258154	6.339839107	5.133640831
ENSRNOG00000052177	9	111443857	112927692	1.483835	12.01844207	7.244213659
ENSRNOG00000052212	17	27385458	28896313	1.510855	10.25151332	5.337724375
ENSRNOG00000052247	2	240678920	241007972	0.329052	12.87624147	8.016125479
ENSRNOG00000052273	1	142790912	144388865	1.597953	9.047240196	5.030762256
ENSRNOG00000052354	15	28433031	29104283	0.671252	35.39575252	31.21206911
ENSRNOG00000052391	16	6759694	7610624	0.85093	5.708534233	5.222533848
ENSRNOG00000052393	1	224969176	225946042	0.976866	6.630575643	5.044527185
ENSRNOG00000052415	20	13847284	14525294	0.67801	19.91904729	16.8483588
ENSRNOG00000052467	4	162801790	163637477	0.835687	7.28580387	5.23535083
ENSRNOG00000052469	16	10265971	11799309	1.533338	17.65127999	12.89809103
ENSRNOG00000052477	14	85900629	87206294	1.305665	6.624850153	5.028531929
ENSRNOG00000052506	1	247022074	247287438	0.265364	32.08030704	27.09781447
ENSRNOG00000052604	13	56483659	57541630	1.057971	7.08420479	5.144465626
ENSRNOG00000052651	3	114479006	114856284	0.377278	14.55874147	11.98878792
ENSRNOG00000052725	7	125047807	126100606	1.052799	24.19663833	20.45613727
ENSRNOG00000052767	3	155790711	156264209	0.473498	5.557965777	5.05387246
ENSRNOG00000052810	1	258066584	258155111	0.088527	5.47862555	5.322320638
ENSRNOG00000052873	2	237099905	238045128	0.945223	17.72645309	12.9353032
ENSRNOG00000052979	9	98018715	98455987	0.437272	5.492825023	5.100562759
ENSRNOG00000053011	4	10456563	10853955	0.397392	45.70436704	41.03087623
ENSRNOG00000053034	8	104188408	104370226	0.181818	7.089886398	5.388168462
ENSRNOG00000053079	10	773191	1910787	1.137596	20.88520421	16.27210158
ENSRNOG00000053084	1	99921627	101204731	1.283104	9.514408231	5.860580518
ENSRNOG00000053159	13	110421261	110909552	0.488291	5.691962316	5.077972198
ENSRNOG00000053272	13	50079054	51979783	1.900729	7.724405575	5.376469234

ENSRNOG00000053301	11	60338516	61054602	0.716086	21.25493565	17.05104833
ENSRNOG00000053309	10	73514175	74246313	0.732138	9.618577815	5.370889601
ENSRNOG00000053384	3	170481500	171144513	0.663013	31.84275765	29.48784043
ENSRNOG00000053405	7	138534537	139426628	0.892091	20.13154282	15.24036195
ENSRNOG00000053460	6	107306312	108475440	1.169128	14.45499038	10.45790138
ENSRNOG00000053468	7	139805703	141609085	1.803382	12.21983899	7.340258847
ENSRNOG00000053675	7	139858527	140809208	0.950681	21.65971497	17.94721757
ENSRNOG00000053769	7	143676550	144729688	1.053138	9.897027308	5.414915935
ENSRNOG00000053790	12	30568915	30586430	0.017515	5.315241785	5.214680641
ENSRNOG00000053850	7	2582982	3785094	1.202112	9.174131778	5.488321057
ENSRNOG00000053891	15	38726899	39667314	0.940415	7.835191161	5.640223369
ENSRNOG00000053913	1	20979214	21662112	0.682898	39.47075155	35.68433353
ENSRNOG00000053937	5	22798355	23887741	1.089386	9.056453211	5.01814689
ENSRNOG00000054016	10	67120048	67987966	0.867918	25.59501562	20.69864188
ENSRNOG00000054031	20	3886845	5650175	1.76333	9.416117336	5.183828847
ENSRNOG00000054181	1	148236882	148401996	0.165114	31.32866362	29.59738856
ENSRNOG00000054306	7	69649530	71093350	1.44382	5.513922129	5.059797498
ENSRNOG00000054325	1	141150035	141704628	0.554593	5.862023457	5.316783281
ENSRNOG00000054438	1	63755138	64519746	0.764608	26.86864581	22.84142944
ENSRNOG00000054453	16	49126889	49865228	0.738339	6.948061716	5.079814971
ENSRNOG00000054468	8	61325005	63029616	1.704611	9.011238345	5.004529952
ENSRNOG00000054511	12	9453084	10047113	0.594029	5.798456066	5.199947092
ENSRNOG00000054549	20	12366683	13213562	0.846879	12.6044831	8.513262199
ENSRNOG00000054553	8	104915329	105113983	0.198654	5.528147966	5.404794864
ENSRNOG00000054555	20	10344215	10536524	0.192309	6.88071578	5.010544774
ENSRNOG00000054742	9	4462490	5352203	0.889713	41.67397263	36.74577352
ENSRNOG00000054860	4	162313861	163541679	1.227818	14.67678595	10.34699701
ENSRNOG00000054891	10	34217666	35935613	1.717947	5.588560243	5.015207126
ENSRNOG00000054910	1	261576830	262793213	1.216383	20.42776841	15.45791558
ENSRNOG00000055119	1	87317431	89196364	1.878933	14.95125088	10.07859889
ENSRNOG00000055142	1	12689565	13670553	0.980988	10.37624631	5.450295945
ENSRNOG00000055208	6	42259189	44132463	1.873274	10.83079869	6.045940153
ENSRNOG00000055221	6	107403899	107509151	0.105252	5.553593486	5.351209959
ENSRNOG00000055259	1	80562064	81522930	0.960866	8.13689581	5.061709576
ENSRNOG00000055314	10	13620578	14770582	1.150004	19.87751295	15.08781164
ENSRNOG00000055408	7	120228053	121202730	0.974677	11.94840593	7.499468794
ENSRNOG00000055411	1	264043362	264566124	0.522762	24.1616204	19.27422906
ENSRNOG00000055524	9	9147928	10201918	1.05399	5.497729123	5.091403452
ENSRNOG00000055547	1	49608605	50814236	1.205631	13.42563028	10.27590721
ENSRNOG00000055608	1	80436855	81178891	0.742036	27.18592773	22.28913241
ENSRNOG00000055809	3	152849176	153725467	0.876291	5.551236355	5.106645339
ENSRNOG00000055973	7	118855234	119988364	1.13313	27.63502639	22.72272077
ENSRNOG00000056184	3	55154921	56710365	1.555444	11.0871332	6.119217852
ENSRNOG00000056228	1	115973348	116549615	0.576267	7.236965844	5.578311655
ENSRNOG00000056283	12	47405312	48916528	1.511216	10.15937889	5.335624286
ENSRNOG00000056359	12	21225283	22102480	0.877197	23.76840697	18.96875914

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ENSRNOG00000056389	19	51811345	52391237	0.579892	7.178841927	5.038485401
ENSRNOG00000056422	10	95277850	95545298	0.267448	5.233121803	5.02861952
ENSRNOG00000056431	13	73683103	74622148	0.939045	42.60280972	38.47231553
ENSRNOG00000056435	18	11558	866566	0.855008	29.96472907	27.64651015
ENSRNOG00000056466	9	4425753	5051491	0.625738	8.206252193	5.605563045
ENSRNOG00000056469	1	63755138	64519699	0.764561	8.011547678	5.328306348
ENSRNOG00000056493	7	29131464	29232136	0.100672	7.372637633	5.068950401
ENSRNOG00000056536	11	78989053	79986362	0.997309	13.24105408	8.289754954
ENSRNOG00000056571	1	197224203	199148410	1.924207	14.73192947	10.74095844
ENSRNOG00000056637	20	4814086	5181088	0.367002	21.4679942	16.54258423
ENSRNOG00000056688	5	64716670	64758258	0.041588	39.22610781	34.46624443
ENSRNOG00000056722	14	104093292	106059125	1.965833	9.062059501	5.054473152
ENSRNOG00000056756	6	102397301	103657356	1.260055	7.305723777	5.055459057
ENSRNOG00000056847	9	26455951	27818398	1.362447	9.731157021	5.153216083
ENSRNOG00000056868	3	11469420	12381436	0.912016	5.840349853	5.202299913
ENSRNOG00000056889	12	38531688	39269780	0.738092	11.42003042	6.931636177
ENSRNOG00000057044	3	11739971	13110503	1.370532	17.13312301	12.48878746
ENSRNOG00000057086	4	117226184	118072132	0.845948	5.857570331	5.200277239
ENSRNOG00000057092	10	69662119	70763465	1.101346	7.672837379	5.011057294
ENSRNOG00000057159	2	86164310	88037422	1.873112	6.404904439	5.020016809
ENSRNOG00000057201	12	22308167	22843030	0.534863	6.142548348	5.077060408
ENSRNOG00000057367	16	10262715	11458426	1.195711	17.33282564	12.45681529
ENSRNOG00000057389	9	99778829	100074626	0.295797	6.383464526	5.476335334
ENSRNOG00000057465	3	6470751	7041167	0.570416	5.350070278	5.045095336
ENSRNOG00000057556	4	133514763	134176176	0.661413	19.33807918	15.22231219
ENSRNOG00000057578	1	88818756	89266448	0.447692	7.344138632	5.121587487
ENSRNOG00000057630	9	109577890	110171900	0.59401	38.80968062	34.57371588
ENSRNOG00000057641	14	81664879	82951044	1.286165	5.999814103	5.159219182
ENSRNOG00000057643	4	163345192	163541679	0.196487	5.478132411	5.24980156
ENSRNOG00000057645	1	78804020	80722636	1.918616	11.51496226	6.970921234
ENSRNOG00000057713	4	44114161	44625038	0.510877	12.52971545	7.568119982
ENSRNOG00000057740	3	44753884	46037757	1.283873	8.958070165	5.682400214
ENSRNOG00000057757	7	119118079	119875792	0.757713	6.396974885	5.101934249
ENSRNOG00000057813	6	25478468	27026614	1.548146	7.718003098	5.037529756
ENSRNOG00000057817	3	152282684	152743245	0.460561	16.26768883	12.52961637
ENSRNOG00000057837	15	18098407	19180526	1.082119	5.721970831	5.126716506
ENSRNOG00000057851	13	74839537	76066513	1.226976	16.49885608	12.5122803
ENSRNOG00000057927	12	22306676	22656746	0.35007	5.851710315	5.014055307
ENSRNOG00000057968	4	116906050	118103366	1.197316	8.562401354	5.030199735
ENSRNOG00000057989	1	189632366	190749220	1.116854	31.31901518	26.96668626
ENSRNOG00000058057	15	103937448	104076094	0.138646	26.00610199	22.17202327
ENSRNOG00000058105	1	168273416	169912743	1.639327	10.3214905	5.369938819
ENSRNOG00000058123	12	22306676	22821351	0.514675	7.241397155	5.333646902
ENSRNOG00000058132	1	224361800	225667360	1.30556	10.45619494	5.459171388
ENSRNOG00000058203	1	273832607	274259018	0.426411	9.837690838	5.131109689

ENSRNOG00000058238	20	2235832	3531244	1.295412	8.626694203	5.029329426
ENSRNOG00000058295	8	52233494	52312789	0.079295	25.90766019	25.06632273
ENSRNOG00000058327	3	54861450	55476542	0.615092	6.926594907	5.061152647
ENSRNOG00000058343	10	94914612	95673898	0.759286	6.772093645	5.357489603
ENSRNOG00000058412	8	96566117	98308426	1.742309	5.893246992	5.040616024
ENSRNOG00000058420	1	214720786	215733374	1.012588	8.497623592	5.371963216
ENSRNOG00000058436	1	61332543	61856948	0.524405	25.4366623	20.88032409
ENSRNOG00000058515	3	154860196	155524755	0.664559	6.333982622	5.159355422
ENSRNOG00000058538	1	63182170	64552305	1.370135	7.60343089	5.170830307
ENSRNOG00000058615	1	197002996	198620355	1.617359	23.21492244	18.22856156
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ENSRNOG00000058675	12	22075973	22638964	0.562991	5.710772315	5.059633025
ENSRNOG00000058714	4	162387375	163637477	1.250102	7.919677913	5.105891076
ENSRNOG00000058726	3	170603408	171342066	0.738658	5.21177147	5.011059287
ENSRNOG00000058742	9	25647089	27687431	2.040342	9.045750271	5.053961987
ENSRNOG00000058777	10	108534176	109877518	1.343342	20.53543002	16.32720629
ENSRNOG00000058784	20	2226529	4100855	1.874326	6.288459558	5.098443138
ENSRNOG00000058847	19	51869859	52339985	0.470126	7.842593951	5.787524974
ENSRNOG00000058860	7	139142167	140809208	1.667041	7.322096624	5.084726554
ENSRNOG00000058870	5	126224370	127224052	0.999682	11.36352308	6.409252342
ENSRNOG00000058898	8	78624470	80103160	1.47869	5.576398033	5.105687914
ENSRNOG00000058909	1	63182170	64552305	1.370135	10.78249122	5.810754458
ENSRNOG00000058916	7	139858527	140102569	0.244042	5.758618767	5.60518559
ENSRNOG00000058987	20	4979581	5120294	0.140713	5.38527301	5.049493643
ENSRNOG00000059010	14	980733	2786574	1.805841	26.61642597	21.79307544
ENSRNOG00000059015	7	120102226	120199312	0.097086	7.416699966	5.023450538
ENSRNOG00000059026	7	14449743	15830947	1.381204	16.63096434	11.92682224
ENSRNOG00000059057	16	10262715	11625408	1.362693	13.72074316	9.104481122
ENSRNOG00000059116	12	22656746	23101509	0.444763	6.496011966	5.146993038
ENSRNOG00000059123	14	103378741	103903568	0.524827	17.99051736	15.6054245
ENSRNOG00000059155	19	43147054	43531326	0.384272	5.6877655	5.282120726
ENSRNOG00000059216	11	58013434	58054103	0.040669	6.383438436	5.67886096
ENSRNOG00000059243	3	21143682	22285099	1.141417	7.315862584	5.04083395
ENSRNOG00000059330	1	148236882	148401996	0.165114	19.31939019	16.40464336
ENSRNOG00000059338	7	60441506	60567121	0.125615	31.28464093	27.00957729
ENSRNOG00000059375	3	8978799	9719811	0.741012	27.22988015	25.49204662
ENSRNOG00000059386	1	91268160	91902606	0.634446	34.16311611	33.04327119
ENSRNOG00000059445	20	30445364	31334710	0.889346	6.396302317	5.024659301
ENSRNOG00000059476	5	123918079	125574129	1.65605	14.45207939	9.684773249
ENSRNOG00000059479	14	87345973	87725058	0.379085	9.416478397	5.094632725
ENSRNOG00000059492	1	59985279	60164997	0.179718	5.498503064	5.17685243
ENSRNOG00000059500	1	215802242	217080283	1.278041	8.946147753	5.19829155
ENSRNOG00000059552	12	10334048	12166470	1.832422	6.969531215	5.024493965
ENSRNOG00000059578	6	127612590	128129224	0.516634	21.81590168	18.58625659
ENSRNOG00000059702	8	78455608	79963864	1.508256	10.93540069	5.969258361
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chr2_225765662	2	225801121	225803115	AABR07013165.1
chr15_13136244	15	12756403	12796711	AABR07017145.1
chr2_32659593	2	32310059	32310555	AABR07007875.1
chr14_104717374	14	104708648	104715786	AABR07016572.1
chr7_90492077	7	90421850	90423551	AABR07057844.2
chr1_190800757	1	189944895	189960073	Crym
chr1_168010791	1	168957460	168958836	LOC100134871
chr12_6267342	12	6403940	6473321	B3glct
chr1_261987692	1	261989467	261991896	AC096317.4
chr4_163328191	4	162830407	162831983	AABR07062154.1
chr1_143548721	1	143443300	143535583	Homer2
chr10_35405706	10	36098051	36304409	Adamts2
chr2_23840160	2	23857995	23941084	Scamp1
chr14_105189682	14	105914769	105925662	AABR07016592.1
chr7_140809208	7	140585832	140600818	Lmbr1l
chr1_255050542	1	255418170	255419360	AC121740.1
chr20_4996174	20	4673843	4792450	AABR07044404.1
chr9_16015422	9	16513857	16513987	RF00413
chr18_28578210	18	28414009	28428117	Slc23a1
chrX_45416225	X	45178446	45187149	LOC103689993
chr18_15232702	18	15264768	15265050	RF00100
chr5_24214138	5	24220336	24226331	LOC102555924
chr6_128129224	6	128084033	128084163	RF00560
chr2_219857664	2	219705620	219741886	Slc35a3

chr2_140696439	2	140708397	140727281	Mgst2
chr4_120509233	4	120551599	120559078	AC119580.1
chr15_2042358	15	2338415	2346171	AABR07016856.1
chr1_64143848	1	64126882	64131814	Leng1
chr20_3798422	20	3866636	3870351	AC098547.2
chr20_5161900	20	5346501	5347801	AABR07044420.1
chr20_4849019	20	5351611	5354095	AABR07044421.1
chr12_10203494	12	10305498	10305985	AABR07035317.2
chr6_13219651	6	13575280	13585292	AABR07062897.1
chr12_11308523	12	10716834	10738373	AABR07035343.1
chr12_10823660	12	10752462	10754647	AABR07035345.1
chr1_243232785	1	243033437	243034383	AABR07006625.1
chr9_64068551	9	65013862	65099433	Aox3
chr9_64300917	9	65089965	65146672	AABR07067810.1
chr1_221491755	1	221158098	221158792	AC134224.3
chr1_221200244	1	221508159	221512116	AC120237.2
chr20_13982315	20	13988442	14001269	AABR07044631.2

Supplementary Table 6. Genes mapped with cis-eQTLs in Adipose

Ensembl gene name	cis-eQTL information					
	CHR	Left bounda	Right bound	Interval	maximum logP	minimum logP
ENSRNOG00000000034	13	48892265	49496376	0.604111	6.686074198	5.822954353
ENSRNOG00000000035	14	980733	2823146	1.842413	11.17478035	6.356161237
ENSRNOG00000000040	13	72573892	73882665	1.308773	13.01420938	8.387701164
ENSRNOG00000000043	14	1063799	2786574	1.722775	25.87598867	21.02266899
ENSRNOG00000000047	3	82132281	82393631	0.26135	5.585369917	5.297997936
ENSRNOG00000000068	13	110218872	110929296	0.710424	5.532585659	5.063796916
ENSRNOG00000000073	14	1748547	2823146	1.074599	15.42613715	12.08560652
ENSRNOG00000000095	2	198037733	199538314	1.500581	5.828175351	5.081236961
ENSRNOG00000000155	15	58175032	58706421	0.531389	5.991171252	5.415388748
ENSRNOG00000000168	3	114241518	114970070	0.728552	37.19985238	32.24086642
ENSRNOG00000000172	3	114070351	115882725	1.812374	30.73254587	26.18425946
ENSRNOG00000000177	7	12085496	13732846	1.64735	12.08051209	7.085618763
ENSRNOG00000000186	7	119075178	119582427	0.507249	5.901550678	5.104664129
ENSRNOG00000000233	10	36334387	36378306	0.043919	5.47642861	5.148718296
ENSRNOG00000000245	10	97254270	98286299	1.032029	7.872987923	5.053610823
ENSRNOG00000000279	20	48884448	49447702	0.563254	46.64020773	42.56198097
ENSRNOG00000000304	20	45488054	46997044	1.50899	6.642244763	5.1452559
ENSRNOG00000000306	20	46215021	46997879	0.782858	6.110996235	5.335709107
ENSRNOG00000000327	20	50362255	51700124	1.337869	6.74652705	5.068262267
ENSRNOG00000000386	20	26439353	27396102	0.956749	18.09047584	13.27988555
ENSRNOG00000000433	20	3797374	5181359	1.383985	8.219275982	5.224104929
ENSRNOG00000000442	20	3980299	5181359	1.20106	6.412627312	5.02199737
ENSRNOG00000000470	20	5430087	5642991	0.212904	24.55916657	21.4502837
ENSRNOG00000000477	20	5427922	5533215	0.105293	7.436086114	6.08678083
ENSRNOG00000000486	20	5523973	5581788	0.057815	5.684962861	5.6154623
ENSRNOG00000000495	20	7146804	8089117	0.942313	7.05792059	5.357331751
ENSRNOG00000000502	20	6812897	8075940	1.263043	8.24267728	5.398443263
ENSRNOG00000000504	20	7156175	8396576	1.240401	11.60841908	6.613151787
ENSRNOG00000000513	20	5917131	6987069	1.069938	15.54592536	10.77232836
ENSRNOG00000000522	20	5982176	6987069	1.004893	20.39082926	18.05848299
ENSRNOG00000000525	20	6096213	7317448	1.221235	6.580209467	5.374279855
ENSRNOG00000000531	20	8200326	9013886	0.81356	12.14821105	7.656247705
ENSRNOG00000000546	20	40816023	41353909	0.537886	14.31075012	10.07606127
ENSRNOG00000000557	20	31022857	32034472	1.011615	7.600894583	5.46336422
ENSRNOG00000000576	20	29137988	29792124	0.654136	15.36271728	10.45081897
ENSRNOG00000000581	20	48508044	48768166	0.260122	9.285951562	5.157647786
ENSRNOG00000000590	20	44161401	45667748	1.506347	12.67395156	7.971279658
ENSRNOG00000000604	20	42282435	43088834	0.806399	7.254791612	5.09326158
ENSRNOG00000000635	20	21761997	22241926	0.479929	5.503487203	5.301801781
ENSRNOG00000000638	20	21541586	23023945	1.482359	12.12824927	7.289243782
ENSRNOG00000000657	13	55224476	56475433	1.250957	7.356528225	5.075497164
ENSRNOG00000000699	12	47931983	49070238	1.138255	6.415992308	5.038157163

ENSRNOG00000000702	12	47931983	49632014	1.700031	7.349453926	5.139384331
ENSRNOG00000000718	11	1365930	2777342	1.411412	7.638591715	5.082873657
ENSRNOG00000000723	20	3971783	5762634	1.790851	17.56592639	12.67086016
ENSRNOG00000000729	20	242135	414655	0.17252	6.253825219	5.182844566
ENSRNOG00000000768	20	1050706	2533639	1.482933	20.40830194	15.90635641
ENSRNOG00000000778	20	1965560	3067042	1.101482	6.782586435	5.338659181
ENSRNOG00000000787	20	3234049	3680501	0.446452	20.56441017	19.36805777
ENSRNOG00000000795	20	3123326	3769641	0.646315	7.206385219	5.016861356
ENSRNOG00000000801	20	37185991	37793002	0.607011	8.357991663	5.030534705
ENSRNOG00000000802	20	37052268	38109693	1.057425	16.57998722	11.64042013
ENSRNOG00000000804	20	3123326	3779154	0.655828	11.82199492	8.168258311
ENSRNOG00000000805	20	37275434	38773843	1.498409	8.838794548	5.842577259
ENSRNOG00000000815	20	41054039	41353909	0.29987	21.42585782	18.12892386
ENSRNOG00000000823	20	26929157	28364853	1.435696	11.9687608	9.464411018
ENSRNOG00000000826	20	2565909	3680501	1.114592	6.136396691	5.121155474
ENSRNOG00000000833	20	3123326	3680501	0.557175	6.52398186	5.273611154
ENSRNOG00000000841	20	3892983	5751889	1.858906	11.27770909	6.278451279
ENSRNOG00000000847	20	4814086	4881358	0.067272	5.272179826	5.257423264
ENSRNOG00000000848	20	4335432	5751889	1.416457	11.23844405	6.395985409
ENSRNOG00000000855	20	4594669	5428307	0.833638	10.06445681	5.074023905
ENSRNOG00000000860	20	4014605	5179426	1.164821	7.186067544	5.086712602
ENSRNOG00000000893	12	29577038	29956349	0.379311	7.093675215	5.811224712
ENSRNOG00000000902	12	6081108	7050722	0.969614	8.932293315	5.359071609
ENSRNOG00000000922	12	29492216	31031292	1.539076	8.038596575	5.143408482
ENSRNOG00000000925	12	30065218	30951867	0.886649	35.87326589	31.52677436
ENSRNOG00000000937	12	8032017	9738977	1.70696	12.63888337	7.86452241
ENSRNOG00000000956	12	9135989	10240946	1.104957	11.53524304	6.590280431
ENSRNOG00000000985	12	10705828	11612867	0.907039	6.661433621	5.020900449
ENSRNOG00000000996	12	10824367	12284580	1.460213	9.274372888	5.442765154
ENSRNOG00000001001	12	1208195	2578435	1.37024	7.560164689	5.034816062
ENSRNOG00000001017	12	1504147	2302434	0.798287	7.365651066	5.15460013
ENSRNOG00000001032	12	11749472	13651227	1.901755	9.3055644	5.099382044
ENSRNOG00000001033	15	58147632	58368398	0.220766	6.225018489	5.500483686
ENSRNOG00000001035	12	37313073	38374611	1.061538	11.82978544	7.056220962
ENSRNOG00000001037	15	58057581	58696703	0.639122	5.426619536	5.16661209
ENSRNOG00000001040	12	12974654	13631807	0.657153	5.39308573	5.064381519
ENSRNOG00000001049	15	57455586	58376610	0.921024	7.056901	5.160292322
ENSRNOG00000001050	12	11762328	13317456	1.555128	9.069354196	5.164171393
ENSRNOG00000001052	15	57470220	57862751	0.392531	6.623341322	5.148667909
ENSRNOG00000001056	12	2411799	3514403	1.102604	12.45402599	7.796509533
ENSRNOG00000001061	12	37517112	38523564	1.006452	5.271862954	5.047360158
ENSRNOG00000001072	12	3915896	5294563	1.378667	24.11559826	19.14232538
ENSRNOG00000001082	12	37883957	38875359	0.991402	13.41390042	8.465905688
ENSRNOG00000001090	12	702588	2182350	1.479762	8.364945132	5.055957977
ENSRNOG00000001092	12	702588	1983370	1.280782	6.799005217	5.333075519
ENSRNOG00000001113	12	13065535	14850548	1.785013	7.545314635	5.161068139

ENSRNOG00000001114	12	14604048	14943472	0.339424	6.32981174	5.470400843
ENSRNOG00000001123	12	42950326	44378752	1.428426	6.545841395	5.03908081
ENSRNOG00000001126	12	43873666	44741469	0.867803	6.221616017	5.350943842
ENSRNOG00000001156	12	46292855	47087798	0.794943	7.172868906	5.358753145
ENSRNOG00000001172	12	46292855	47268304	0.975449	15.48306674	11.28648098
ENSRNOG00000001173	12	46292855	47268304	0.975449	17.38360914	12.45835237
ENSRNOG00000001193	20	10257470	10826029	0.568559	6.035767291	5.414063653
ENSRNOG00000001204	12	47405312	48490735	1.085423	7.409594574	5.002734888
ENSRNOG00000001214	20	10940980	11801153	0.860173	22.48916213	17.9711217
ENSRNOG00000001225	20	11080635	12242905	1.16227	5.881494168	5.042013734
ENSRNOG00000001228	20	11900655	12119220	0.218565	18.45438361	16.77654165
ENSRNOG00000001232	20	11832230	12786716	0.954486	7.904981559	5.116133925
ENSRNOG00000001239	20	13852042	14680661	0.828619	8.280300879	5.846175409
ENSRNOG00000001242	20	13853293	14024509	0.171216	29.4424721	26.05407726
ENSRNOG00000001251	12	16162985	16176263	0.013278	25.34149799	22.53485912
ENSRNOG00000001253	12	16316835	16750036	0.433201	6.969426587	5.447733178
ENSRNOG00000001287	12	17174139	17700615	0.526476	14.98961271	12.04887898
ENSRNOG00000001289	12	17294997	17902659	0.607662	7.764430235	5.274025699
ENSRNOG00000001300	12	38338399	40256781	1.918382	10.14921709	5.32001771
ENSRNOG00000001336	12	38338399	39777512	1.439113	9.949475896	5.003071087
ENSRNOG00000001339	12	38340101	39002098	0.661997	7.731586059	5.217233624
ENSRNOG00000001344	12	40690627	41199342	0.508715	5.96271382	5.542138982
ENSRNOG00000001347	12	39574079	41306347	1.732268	8.16537127	5.009783633
ENSRNOG00000001348	12	40690627	41199342	0.508715	5.598000877	5.292661047
ENSRNOG00000001391	12	41618446	41650586	0.03214	5.12157046	5.117418788
ENSRNOG00000001417	12	22121592	23579551	1.457959	9.314467061	5.0855098
ENSRNOG00000001426	12	22843563	24526122	1.682559	17.82417423	13.16166636
ENSRNOG00000001429	12	22848107	24409567	1.56146	12.04642436	7.226353927
ENSRNOG00000001453	12	23579551	24605991	1.02644	17.07954915	12.17112852
ENSRNOG00000001457	12	25075680	25665331	0.589651	11.76093179	7.033353795
ENSRNOG00000001528	11	58147255	58731075	0.58382	5.361570275	5.057677977
ENSRNOG00000001598	11	26187652	27933139	1.745487	8.350282063	5.008142647
ENSRNOG00000001603	11	26211355	27998672	1.787317	10.93576017	6.358769534
ENSRNOG00000001640	11	44517663	46441406	1.923743	11.38090354	6.597912898
ENSRNOG00000001642	11	44517663	46441406	1.923743	7.750546772	5.255118224
ENSRNOG00000001644	11	44354609	45543272	1.188663	9.767094946	5.327768275
ENSRNOG00000001647	11	36099521	36252071	0.15255	7.080165825	5.555225845
ENSRNOG00000001653	11	44003284	45023736	1.020452	8.938550768	5.019098172
ENSRNOG00000001682	11	34046800	35046903	1.000103	5.397176942	5.078530003
ENSRNOG00000001686	11	34022210	35144175	1.121965	5.772937025	5.08769589
ENSRNOG00000001699	11	33350045	34718175	1.36813	27.55021335	22.63181206
ENSRNOG00000001701	11	33584843	33881992	0.297149	5.0731504	5.005094402
ENSRNOG00000001727	11	72708956	74227277	1.518321	8.35897716	5.366481592
ENSRNOG00000001736	11	72572620	73176714	0.604094	6.133691883	5.056122021
ENSRNOG00000001738	11	83718421	84389212	0.670791	6.791787762	5.834802418
ENSRNOG00000001750	11	83816949	84389212	0.572263	6.49013419	5.528147756

ENSRNOG00000001764	11	82344283	83615474	1.271191	10.89679145	7.490491594
ENSRNOG00000001777	11	70246427	72138643	1.892216	18.61241189	14.13100572
ENSRNOG00000001811	4	180766674	181854227	1.087553	6.960738154	5.052626344
ENSRNOG00000001825	11	87962169	89958765	1.996596	10.03100363	5.719917993
ENSRNOG00000001834	11	88447072	90137636	1.690564	18.41903417	13.48131115
ENSRNOG00000001842	4	180766674	182267291	1.500617	10.32548515	5.763680713
ENSRNOG00000001845	11	87428045	89286467	1.858422	10.26531586	5.351826121
ENSRNOG00000001847	4	181375663	182960868	1.585205	12.95947783	8.097822843
ENSRNOG00000001854	4	182960868	183634643	0.673775	5.765613584	5.597348064
ENSRNOG00000001864	11	87428045	88939077	1.511032	8.732559908	5.010001227
ENSRNOG00000001874	11	87457240	88442172	0.984932	12.60161678	11.28669327
ENSRNOG00000001889	11	86292811	87654344	1.361533	9.029654139	5.29685895
ENSRNOG00000001911	11	84189059	84986083	0.797024	23.20543738	18.86831602
ENSRNOG00000001928	11	77199533	77578052	0.378519	6.544802652	5.040520473
ENSRNOG00000001960	14	21102132	23094098	1.991966	6.214934259	5.077798937
ENSRNOG00000001963	11	37561796	38067305	0.505509	12.44623725	8.001544667
ENSRNOG00000001964	11	52552668	54321677	1.769009	6.539811954	5.044147403
ENSRNOG00000001979	11	31577721	32726457	1.148736	12.13545966	7.453463009
ENSRNOG00000002035	14	14040255	14841194	0.800939	19.10294072	14.36447446
ENSRNOG00000002061	14	7293965	8575223	1.281258	8.255232247	5.016798159
ENSRNOG00000002072	11	30590706	31683134	1.092428	6.915021426	5.003504709
ENSRNOG00000002080	11	30140398	31953881	1.813483	18.10262011	13.43005937
ENSRNOG00000002085	14	33304325	34094891	0.790566	27.80591074	23.31315822
ENSRNOG00000002089	14	16348360	17208695	0.860335	6.903532836	5.015192478
ENSRNOG00000002134	14	4989625	6931491	1.941866	17.3534304	13.09953545
ENSRNOG00000002135	14	37135959	37136355	0.000396	5.8052129	5.075934415
ENSRNOG00000002137	14	32926161	34253198	1.327037	5.803169063	5.115502577
ENSRNOG00000002144	14	33304325	34208164	0.903839	6.809251252	5.065457175
ENSRNOG00000002146	14	6013195	6798843	0.785648	5.545637327	5.284796847
ENSRNOG00000002158	14	6592191	7318081	0.72589	32.5443892	28.53716305
ENSRNOG00000002159	14	10094667	10920635	0.825968	5.382469797	5.113776747
ENSRNOG00000002167	14	6025517	7268350	1.242833	9.784583923	5.14375132
ENSRNOG00000002169	14	34530840	34869317	0.338477	5.524247586	5.016633386
ENSRNOG00000002177	14	61712420	62927565	1.215145	11.91085458	6.988053676
ENSRNOG00000002188	14	10604388	10982849	0.378461	5.757578833	5.083398609
ENSRNOG00000002192	14	45984878	46917835	0.932957	24.95139731	20.9038382
ENSRNOG00000002194	14	10589631	11600444	1.010813	11.22836189	6.520202932
ENSRNOG00000002203	14	10569353	11513688	0.944335	9.768086683	5.017118005
ENSRNOG00000002204	14	16619062	17919188	1.300126	7.74529888	5.001725142
ENSRNOG00000002208	14	16434653	17573004	1.138351	6.940795989	5.009726382
ENSRNOG00000002212	14	6118235	7268350	1.150115	8.599993555	5.112941408
ENSRNOG00000002218	14	16340396	17919188	1.578792	11.9366396	7.014868785
ENSRNOG00000002224	14	62044303	62499774	0.455471	5.47116903	5.117929197
ENSRNOG00000002225	14	17065249	17578533	0.513284	5.569622568	5.072085253
ENSRNOG00000002318	14	42269757	42643419	0.373662	5.963359867	5.157392394
ENSRNOG00000002352	13	69436270	69906057	0.469787	5.923202014	5.030476641

ENSRNOG00000002372	10	32826260	33420386	0.594126	6.261948676	5.155830155
ENSRNOG00000002381	14	12026736	13385691	1.358955	6.588843265	5.140982768
ENSRNOG00000002443	10	42307563	43620241	1.312678	12.12882798	7.387389068
ENSRNOG00000002452	10	3694784	5634137	1.939353	7.67715341	5.392898906
ENSRNOG00000002468	13	77425432	78565509	1.140077	23.90828743	19.51887037
ENSRNOG00000002473	13	67229877	68440857	1.21098	8.733793319	5.155298725
ENSRNOG00000002506	14	16966447	17583888	0.617441	6.803055022	5.077551731
ENSRNOG00000002516	6	17831677	18602735	0.771058	11.64481055	8.503021539
ENSRNOG00000002546	14	16643347	18105522	1.462175	9.939406214	5.082209015
ENSRNOG00000002569	13	77023404	78661331	1.637927	9.428898201	5.040762252
ENSRNOG00000002572	13	77425432	77745680	0.320248	5.774835823	5.012935297
ENSRNOG00000002582	10	43083010	43226142	0.143132	5.378003765	5.181889508
ENSRNOG00000002593	13	105716981	106385831	0.66885	5.470015764	5.007275357
ENSRNOG00000002610	10	6523338	8010582	1.487244	16.19075744	11.19384362
ENSRNOG00000002627	13	107367490	108349519	0.982029	8.045455512	5.296579001
ENSRNOG00000002645	10	43090124	44594523	1.504399	7.429167781	5.072019056
ENSRNOG00000002721	11	65214641	66958428	1.743787	10.85705373	6.130442467
ENSRNOG00000002728	14	17697900	18694602	0.996702	21.73645555	16.76692965
ENSRNOG00000002736	13	77314682	78756813	1.442131	10.60561324	5.756337906
ENSRNOG00000002795	10	101827029	102794980	0.967951	8.062257009	5.187383995
ENSRNOG00000002797	11	65278510	66271112	0.992602	14.43435225	9.662969689
ENSRNOG00000002811	13	62669061	64954769	2.285708	21.6110268	16.62906588
ENSRNOG00000002820	10	43090124	44776268	1.686144	8.867859282	5.007230851
ENSRNOG00000002828	10	81977999	82742463	0.764464	19.92617774	15.9722588
ENSRNOG00000002841	13	98300189	99356788	1.056599	8.377529128	5.278795568
ENSRNOG00000002879	13	98218995	98760951	0.541956	5.608117652	5.156679175
ENSRNOG00000002889	14	18748056	20119331	1.371275	15.66509503	10.76399851
ENSRNOG00000002907	13	51449015	51518039	0.069024	5.625363638	5.04275685
ENSRNOG00000002911	14	18781132	19236147	0.455015	26.42380004	22.95969351
ENSRNOG00000002970	10	47643923	49503493	1.85957	9.319490905	5.032798125
ENSRNOG00000002999	11	64091703	65280924	1.189221	7.871564959	5.238130948
ENSRNOG00000003026	19	25090369	26104379	1.01401	6.996643593	5.111733902
ENSRNOG00000003031	13	50159711	51105258	0.945547	6.403693409	5.117875504
ENSRNOG00000003042	13	80343877	80638212	0.294335	6.169760186	5.07420514
ENSRNOG00000003070	10	47874967	49808311	1.933344	12.64891588	7.82594097
ENSRNOG00000003108	10	90230118	91714417	1.484299	12.77979035	7.859444361
ENSRNOG00000003117	10	95082506	96468711	1.386205	6.899336913	5.274109075
ENSRNOG00000003121	10	61202596	61960021	0.757425	6.227033171	5.20171239
ENSRNOG00000003129	10	45181301	45980137	0.798836	7.946509967	5.034187419
ENSRNOG00000003144	10	103337758	103427704	0.089946	35.19980492	33.79769423
ENSRNOG00000003172	10	61300663	63110212	1.809549	8.384547067	5.445770917
ENSRNOG00000003219	10	48339181	49808311	1.46913	17.01314574	12.14496569
ENSRNOG00000003220	13	98218995	99815863	1.596868	12.99230795	8.009926724
ENSRNOG00000003234	10	10023889	11330214	1.306325	11.37297808	6.48178376
ENSRNOG00000003244	10	35345184	35964002	0.618818	23.13177909	18.27138876
ENSRNOG00000003253	14	69298874	70594268	1.295394	7.940410085	5.028814406

ENSRNOG00000003259	10	107090954	107767373	0.676419	22.91211585	18.05347173
ENSRNOG00000003262	10	95641730	97011074	1.369344	8.178313105	5.333430222
ENSRNOG00000003281	20	34763072	35105864	0.342792	5.171063428	5.020872845
ENSRNOG00000003291	13	83009159	84936465	1.927306	27.89268061	23.00719411
ENSRNOG00000003307	19	25090369	26208867	1.118498	10.21370495	5.28155044
ENSRNOG00000003328	10	10958908	11324727	0.365819	5.893606175	5.45640491
ENSRNOG00000003330	10	81316670	82867796	1.551126	9.998279245	5.093744935
ENSRNOG00000003332	10	45999309	46364700	0.365391	6.048225647	5.186869052
ENSRNOG00000003402	13	72573892	73818638	1.244746	6.611329667	5.401261862
ENSRNOG00000003435	X	142469526	144131424	1.661898	5.66780146	5.132506414
ENSRNOG00000003464	10	103886675	104433643	0.546968	38.21293949	36.47559417
ENSRNOG00000003468	13	100448553	101270281	0.821728	5.564018295	5.005873981
ENSRNOG00000003498	13	91940417	92578205	0.637788	9.389264104	5.318001061
ENSRNOG00000003509	13	91988517	93108144	1.119627	16.91822756	12.19359157
ENSRNOG00000003518	13	91988517	93108144	1.119627	15.76130849	10.82089534
ENSRNOG00000003521	13	91980147	93212349	1.232202	14.2701765	9.471728476
ENSRNOG00000003536	10	35252544	35953168	0.700624	22.12016515	17.12510996
ENSRNOG00000003537	13	91988517	93108144	1.119627	10.98845185	6.001342378
ENSRNOG00000003585	X	13198426	14951469	1.753043	12.06369976	7.437105225
ENSRNOG00000003629	13	99148890	100381800	1.23291	9.445904924	5.041716199
ENSRNOG00000003650	10	103886675	104433643	0.546968	5.62225551	5.118649966
ENSRNOG00000003657	10	12257091	13548456	1.291365	8.03203995	5.029363857
ENSRNOG00000003661	10	103381281	104255922	0.874641	7.294028235	5.056499153
ENSRNOG00000003709	13	93588480	93842409	0.253929	5.793566748	5.19701466
ENSRNOG00000003714	10	36043928	36366717	0.322789	5.099395511	5.02119975
ENSRNOG00000003755	19	24287944	24412415	0.124471	5.896480994	5.114726687
ENSRNOG00000003759	6	121921996	122317195	0.395199	14.36790361	9.55606271
ENSRNOG00000003794	10	10065789	11409434	1.343645	10.07546872	5.166107203
ENSRNOG00000003827	10	97304324	98079626	0.775302	5.560305178	5.060333906
ENSRNOG00000003853	19	23826659	25450122	1.623463	10.52132467	5.689522861
ENSRNOG00000003889	7	58251611	59089667	0.838056	5.969381035	5.01409974
ENSRNOG00000003905	10	91710853	92356085	0.645232	11.83162555	6.982966
ENSRNOG00000003925	13	110929296	112455298	1.526002	9.405407535	5.053955403
ENSRNOG00000003931	10	96826934	98670962	1.844028	8.44460953	5.054128667
ENSRNOG00000003964	7	98738797	100578103	1.839306	6.482937757	5.128915513
ENSRNOG00000003969	10	97604050	98316026	0.711976	10.26058076	5.463033345
ENSRNOG00000003988	6	27564866	28824228	1.259362	12.37836364	8.161575455
ENSRNOG00000004009	X	134685891	135115748	0.429857	21.51843488	16.92805808
ENSRNOG00000004014	10	108411994	109786203	1.374209	12.05621766	8.802400402
ENSRNOG00000004016	X	27021206	27098031	0.076825	15.76748755	14.57852238
ENSRNOG00000004018	13	72905950	74692344	1.786394	10.74748507	5.784009632
ENSRNOG00000004040	10	98127780	98317982	0.190202	9.358110263	5.411419477
ENSRNOG00000004062	13	46499242	48303260	1.804018	9.888831064	5.001276043
ENSRNOG00000004076	9	52360936	52932000	0.571064	5.357088036	5.187107782
ENSRNOG00000004089	7	93531337	95409700	1.878363	10.64181916	5.874544747
ENSRNOG00000004103	6	80257984	80636922	0.378938	5.36288291	5.043887592

ENSRNOG00000004104	8	131712054	132913499	1.201445	6.138917332	5.053108841
ENSRNOG00000004146	10	10126628	11324727	1.198099	16.48355829	11.61555726
ENSRNOG00000004147	10	97358485	98446159	1.087674	7.654348388	5.010869001
ENSRNOG00000004160	X	28501308	29465950	0.964642	31.57270859	26.58975956
ENSRNOG00000004162	13	46987896	48412378	1.424482	8.084618031	5.799677008
ENSRNOG00000004245	13	84976052	85650692	0.67464	12.70101766	7.91503256
ENSRNOG00000004263	13	109463083	111238982	1.775899	14.14431439	9.271504492
ENSRNOG00000004280	14	84305610	84343425	0.037815	21.84198039	16.85039515
ENSRNOG00000004292	6	75296172	76417653	1.121481	12.97003651	8.468151075
ENSRNOG00000004307	13	73929558	74048869	0.119311	5.249940842	5.235126598
ENSRNOG00000004330	X	114526140	115082969	0.556829	8.517002378	5.235030899
ENSRNOG00000004333	10	12482553	12813947	0.331394	5.864447625	5.24439629
ENSRNOG00000004337	13	73411047	74692344	1.281297	14.09908421	9.388973853
ENSRNOG00000004367	7	33687362	34081043	0.393681	5.316674511	5.069229856
ENSRNOG00000004402	13	109399564	111078509	1.678945	9.630657048	5.170353782
ENSRNOG00000004411	7	58775307	59325012	0.549705	15.62593036	11.01265095
ENSRNOG00000004421	7	64173705	64567384	0.393679	6.301202557	5.183198541
ENSRNOG00000004438	7	132466666	133418764	0.952098	8.201681488	5.004232837
ENSRNOG00000004449	6	42259189	42767885	0.508696	19.01007144	14.78712792
ENSRNOG00000004461	10	12233085	14094001	1.860916	14.29699199	9.44857835
ENSRNOG00000004466	3	170032315	171342066	1.309751	14.40358248	9.537645465
ENSRNOG00000004476	7	63140933	63530015	0.389082	13.90521288	9.676485771
ENSRNOG00000004498	6	60174336	60299466	0.12513	5.754443536	5.446719074
ENSRNOG00000004503	6	94824619	95196546	0.371927	5.822921495	5.016397373
ENSRNOG00000004532	3	3979374	5084638	1.105264	8.335391909	6.070271762
ENSRNOG00000004549	10	73514175	74246313	0.732138	12.59436022	10.20173328
ENSRNOG00000004555	14	83455864	84339990	0.884126	6.09523493	5.067443878
ENSRNOG00000004583	7	118115395	118895373	0.779978	16.35391729	14.3256655
ENSRNOG00000004595	7	142167357	143072338	0.904981	5.738677975	5.094416006
ENSRNOG00000004603	7	63140933	64636169	1.495236	11.06448029	6.110711114
ENSRNOG00000004608	10	10184882	11152965	0.968083	5.431536071	5.056911496
ENSRNOG00000004613	X	29495180	29775067	0.279887	11.77063675	9.365887202
ENSRNOG00000004628	7	142137266	142228121	0.090855	5.459068698	5.315514605
ENSRNOG00000004670	14	85958259	86722033	0.763774	7.192570946	5.096099356
ENSRNOG00000004726	13	47232258	48303260	1.071002	5.65538673	5.116878569
ENSRNOG00000004727	7	28719308	28892178	0.17287	38.41788033	35.71885698
ENSRNOG00000004736	13	73929558	75300493	1.370935	8.577359563	5.275308909
ENSRNOG00000004744	7	100598516	101919258	1.320742	8.258843861	5.049698108
ENSRNOG00000004793	7	10360558	12076150	1.715592	15.8495314	12.27908438
ENSRNOG00000004794	6	93951552	95217354	1.265802	6.376123828	5.064406895
ENSRNOG00000004857	6	91984962	92977854	0.992892	11.18753401	7.106988297
ENSRNOG00000004899	6	36293647	37439697	1.14605	6.542874699	5.127942725
ENSRNOG00000004941	6	25350867	27026614	1.675747	27.90554314	23.05107288
ENSRNOG00000004947	7	14449743	15426275	0.976532	5.25588513	5.046397027
ENSRNOG00000004951	3	136620978	136974865	0.353887	25.21598659	20.63733614
ENSRNOG00000004966	3	50520647	52105315	1.584668	8.268666587	5.356515975

ENSRNOG00000004971	X	33477587	34136284	0.658697	7.014405128	5.594790006
ENSRNOG00000004973	6	134792986	135296384	0.503398	6.243884608	5.388405999
ENSRNOG00000005023	6	54737626	55886294	1.148668	6.835193572	5.037318233
ENSRNOG00000005031	3	5154565	5689465	0.5349	5.542204252	5.118388561
ENSRNOG00000005081	10	85448613	87052586	1.603973	6.474853867	5.03625073
ENSRNOG00000005108	14	77969942	78938281	0.968339	16.93303571	12.28662836
ENSRNOG00000005122	14	82618174	83637901	1.019727	7.392372431	5.215240489
ENSRNOG00000005123	7	81413955	83353837	1.939882	15.91651474	11.05045925
ENSRNOG00000005133	10	91766880	93355051	1.588171	8.750862474	5.001486398
ENSRNOG00000005151	6	6945001	8151615	1.206614	6.763388729	5.086326321
ENSRNOG00000005174	6	137789999	138345299	0.5553	5.821292525	5.032035341
ENSRNOG00000005175	6	97694449	98832131	1.137682	11.33377696	6.394180054
ENSRNOG00000005177	13	74804741	75574508	0.769767	14.4839164	9.78610406
ENSRNOG00000005193	10	55539108	56242795	0.703687	51.33450127	49.02485173
ENSRNOG00000005195	3	142509423	144181853	1.67243	7.215240067	5.212192724
ENSRNOG00000005196	3	102828028	104051474	1.223446	5.282422175	5.068070083
ENSRNOG00000005215	X	85213113	87012206	1.799093	7.041451863	5.056961951
ENSRNOG00000005228	7	28561897	29860151	1.298254	14.2850718	9.484185281
ENSRNOG00000005229	13	74735828	75997979	1.262151	6.021342263	5.216117379
ENSRNOG00000005250	6	7700845	7925842	0.224997	5.358227972	5.277702961
ENSRNOG00000005256	3	70282319	71873098	1.590779	7.020765486	5.038256313
ENSRNOG00000005266	7	34225782	35378852	1.15307	17.46553787	12.47481073
ENSRNOG00000005268	4	13344878	14869234	1.524356	12.15222141	7.821430449
ENSRNOG00000005302	14	77130491	77214402	0.083911	17.05757424	14.21670925
ENSRNOG00000005309	7	142583301	143369228	0.785927	21.37477696	17.03808229
ENSRNOG00000005332	7	122312981	123780181	1.4672	8.386192485	5.136047881
ENSRNOG00000005355	13	90323888	90751063	0.427175	5.263835523	5.027789505
ENSRNOG00000005362	7	58962585	59994494	1.031909	11.72398059	6.868804211
ENSRNOG00000005409	6	94848985	95247812	0.398827	7.053974306	5.180623242
ENSRNOG00000005447	10	73305351	74246313	0.940962	10.54691101	5.790290094
ENSRNOG00000005464	14	104146912	106023744	1.876832	8.984868151	5.037801452
ENSRNOG00000005492	6	42275774	44046803	1.771029	6.66381483	5.17725495
ENSRNOG00000005504	3	44753884	46412112	1.658228	10.47449038	5.509416087
ENSRNOG00000005575	10	83805759	84556611	0.750852	8.012135391	5.016603265
ENSRNOG00000005610	6	21234171	22452457	1.218286	11.75043681	6.819701126
ENSRNOG00000005655	5	8196103	9524779	1.328676	7.090143654	5.241564267
ENSRNOG00000005667	13	75574508	76129928	0.55542	7.438560316	5.153632528
ENSRNOG00000005686	4	128217429	128480063	0.262634	7.352797295	5.048952797
ENSRNOG00000005708	5	30785792	32745453	1.959661	12.95996674	7.980074013
ENSRNOG00000005711	5	92749186	94163880	1.414694	6.210429132	5.066362507
ENSRNOG00000005726	4	16640732	17101567	0.460835	5.77362697	5.021375423
ENSRNOG00000005730	5	11638243	12975848	1.337605	7.22116718	5.247805089
ENSRNOG00000005731	8	5857894	6913654	1.05576	5.970303146	5.758737164
ENSRNOG00000005772	5	106146141	107722375	1.576234	9.392451518	5.354339867
ENSRNOG00000005801	5	63205949	64196604	0.990655	6.355605392	5.133736637
ENSRNOG00000005809	4	169916698	170935248	1.01855	8.092337255	5.178112624

ENSRNOG00000005857	15	11275096	11371240	0.096144	5.28885901	5.148996382
ENSRNOG00000005900	3	4781243	5967320	1.186077	6.120758579	5.006131086
ENSRNOG00000005903	8	32248636	32945279	0.696643	9.298412334	7.430998202
ENSRNOG00000005906	4	13344878	14869234	1.524356	7.772366937	5.294866693
ENSRNOG00000005920	3	145004081	146809407	1.805326	7.283908004	5.136506098
ENSRNOG00000005924	3	137490824	138585151	1.094327	30.05990979	25.0977889
ENSRNOG00000005929	7	116386519	116642569	0.25605	5.593187039	5.089684358
ENSRNOG00000005930	8	52225530	53876773	1.651243	12.29591745	7.622610449
ENSRNOG00000005955	8	16725928	18489753	1.763825	26.44266068	23.17455435
ENSRNOG00000005965	7	134977789	136133892	1.156103	11.4946602	6.616247119
ENSRNOG00000005975	7	72648102	74195801	1.547699	12.42257993	7.700642232
ENSRNOG00000006000	10	85448613	87179929	1.731316	11.24620816	6.341025921
ENSRNOG00000006025	13	111056921	111945037	0.888116	6.501830843	5.03493367
ENSRNOG00000006028	7	129949665	130876324	0.926659	10.71567078	7.833657966
ENSRNOG00000006068	7	135583573	135807253	0.22368	5.344323635	5.182086351
ENSRNOG00000006096	5	27966006	28134252	0.168246	8.403668304	5.033573783
ENSRNOG00000006114	4	24564990	26482469	1.917479	15.4638829	10.62076619
ENSRNOG00000006119	6	33865804	33972242	0.106438	18.67113026	16.67470983
ENSRNOG00000006131	10	92362367	94185503	1.823136	13.70913682	9.276199375
ENSRNOG00000006148	10	36760640	38272721	1.512081	10.22737381	5.259195102
ENSRNOG00000006199	6	55829971	57142199	1.312228	6.095058101	5.002556248
ENSRNOG00000006227	3	48038956	49595346	1.55639	10.75176186	5.990929253
ENSRNOG00000006324	8	5902581	6841847	0.939266	7.344000753	5.207014092
ENSRNOG00000006326	6	25699066	27568916	1.86985	7.497789062	5.093182826
ENSRNOG00000006329	14	105032186	106052223	1.020037	6.054807236	5.065474922
ENSRNOG00000006334	15	19386187	20176441	0.790254	6.053835009	5.084787786
ENSRNOG00000006356	14	113891575	115438145	1.54657	8.21162417	5.069949765
ENSRNOG00000006365	4	51308615	52618110	1.309495	9.099678757	6.454017188
ENSRNOG00000006369	5	62237107	63319340	1.082233	18.38126271	13.67730212
ENSRNOG00000006375	10	37917531	38146735	0.229204	5.693232694	5.057270926
ENSRNOG00000006384	5	56279734	57421669	1.141935	9.861592965	5.125075314
ENSRNOG00000006392	7	122312981	123529520	1.216539	16.24806088	11.48807032
ENSRNOG00000006472	6	99082824	99995408	0.912584	14.31348156	9.319922422
ENSRNOG00000006505	4	168397901	168969295	0.571394	23.14099487	18.64251103
ENSRNOG00000006582	5	56446339	57961690	1.515351	9.359519709	5.096612772
ENSRNOG00000006611	3	54634972	55793871	1.158899	6.404840099	5.010829474
ENSRNOG00000006615	5	107992692	108093482	0.10079	5.534679624	5.534679624
ENSRNOG00000006631	4	16849601	18277101	1.4275	20.40891635	15.94407579
ENSRNOG00000006699	6	108192748	109462322	1.269574	8.850047928	5.364451541
ENSRNOG00000006726	4	150139133	150998330	0.859197	6.188366658	5.026368562
ENSRNOG00000006733	13	48172795	48412378	0.239583	7.179106711	6.242261232
ENSRNOG00000006735	5	106886167	108687353	1.801186	6.363616588	5.059387301
ENSRNOG00000006744	6	108514967	109156257	0.64129	5.719709641	5.129091476
ENSRNOG00000006749	7	40022528	40832999	0.810471	12.08221666	7.148071327
ENSRNOG00000006766	7	72648102	73951666	1.303564	8.971761869	5.454686959
ENSRNOG00000006779	4	21872413	22863696	0.991283	30.06788912	26.62918614

ENSRNOG00000006795	3	145562564	147098973	1.536409	6.459574305	5.003245244
ENSRNOG00000006800	5	64760027	65665396	0.905369	13.66748741	8.752735337
ENSRNOG00000006831	8	6956136	7361874	0.405738	11.20001683	7.976095631
ENSRNOG00000006844	7	2582982	4067124	1.484142	9.344324996	5.052099752
ENSRNOG00000006893	4	88522057	89716302	1.194245	6.283035308	5.019403659
ENSRNOG00000006895	10	63353670	64934091	1.580421	7.498869424	5.17237003
ENSRNOG00000006916	3	4781243	5956987	1.175744	16.52816277	12.85264781
ENSRNOG00000006919	5	22265684	22461127	0.195443	5.314429253	5.206453711
ENSRNOG00000006926	5	32975869	34488529	1.51266	10.5841429	5.657214112
ENSRNOG00000006947	3	92304930	93963582	1.658652	7.962260875	5.442276847
ENSRNOG00000006957	8	706764	2127517	1.420753	21.27972722	16.39724117
ENSRNOG00000006972	5	63827438	65053811	1.226373	9.973303853	5.232708587
ENSRNOG00000006986	6	75340600	76787828	1.447228	12.41345206	7.706343991
ENSRNOG00000006995	7	137026179	137482800	0.456621	7.489889095	5.186006199
ENSRNOG00000006996	5	38974932	39166705	0.191773	8.38387276	5.405361438
ENSRNOG00000007023	6	2666898	3466586	0.799688	9.891278132	5.342176545
ENSRNOG00000007032	7	137767428	139426628	1.6592	10.68465185	6.113756568
ENSRNOG00000007041	4	88024518	89888200	1.863682	7.580254444	5.119666867
ENSRNOG00000007057	5	146014435	146379557	0.365122	34.3818689	32.20208661
ENSRNOG00000007059	X	124692966	125004109	0.311143	6.332641119	5.678764646
ENSRNOG00000007069	5	8578650	9846275	1.267625	8.770941841	5.259152588
ENSRNOG00000007136	15	3283989	4496497	1.212508	9.819792425	5.039609521
ENSRNOG00000007139	5	33028247	34488529	1.460282	14.41184678	9.56141354
ENSRNOG00000007242	3	1395852	2287158	0.891306	5.597905417	5.006384018
ENSRNOG00000007256	5	27545433	29498512	1.953079	12.28009314	7.310475844
ENSRNOG00000007262	7	123080288	123511467	0.431179	6.619622677	5.017685842
ENSRNOG00000007271	6	105015473	105671906	0.656433	7.408146696	5.097836185
ENSRNOG00000007288	4	113364335	113842734	0.478399	14.98071496	10.99487717
ENSRNOG00000007320	15	17376985	18676898	1.299913	10.70780425	5.892958892
ENSRNOG00000007332	7	118855234	120566651	1.711417	11.12851818	7.036254123
ENSRNOG00000007335	10	69506744	69808863	0.302119	6.674141345	5.023182087
ENSRNOG00000007351	5	33098799	34488529	1.38973	20.85423953	15.9584105
ENSRNOG00000007369	13	51234804	53142296	1.907492	11.22086063	6.230202607
ENSRNOG00000007378	15	17469892	18676898	1.207006	12.77781887	7.85874933
ENSRNOG00000007395	5	64756122	65053811	0.297689	8.338869504	5.198916874
ENSRNOG00000007405	4	77066632	79014253	1.947621	9.437977983	5.479931915
ENSRNOG00000007427	3	145813154	145874684	0.06153	5.009790967	5.009790967
ENSRNOG00000007431	10	38857422	39742193	0.884771	6.054571292	5.28508421
ENSRNOG00000007441	5	38001447	40185633	2.184186	8.309665014	5.122601565
ENSRNOG00000007456	5	29196493	30494087	1.297594	20.07284998	15.12086505
ENSRNOG00000007457	3	71204451	73167533	1.963082	12.20668066	7.348129151
ENSRNOG00000007462	10	38332548	39742193	1.409645	7.411699238	5.4518775
ENSRNOG00000007510	2	123066514	124730268	1.663754	13.83887562	10.84609135
ENSRNOG00000007546	4	33298585	33956266	0.657681	10.73349808	7.034391441
ENSRNOG00000007561	8	27125857	28688563	1.562706	17.54003096	12.54685524
ENSRNOG00000007636	4	51308615	51833906	0.525291	8.309877777	5.946947117

ENSRNOG00000007646	6	105097040	106676217	1.579177	6.982313977	5.377228465
ENSRNOG00000007660	6	99312485	100513631	1.201146	23.81694693	19.65075622
ENSRNOG00000007679	7	120102226	120725758	0.623532	12.00749077	7.599391896
ENSRNOG00000007717	4	171849520	173015185	1.165665	8.140178695	5.543323775
ENSRNOG00000007719	5	35806293	35913341	0.107048	5.836538586	5.074558537
ENSRNOG00000007759	5	133293568	133785674	0.492106	6.960510384	5.072449846
ENSRNOG00000007763	5	164240514	165141148	0.900634	7.414439049	5.427439086
ENSRNOG00000007805	3	158684398	160421283	1.736885	6.763537625	5.130111653
ENSRNOG00000007817	15	18495833	18721203	0.22537	9.412248328	5.226623286
ENSRNOG00000007827	3	148323989	148410118	0.086129	22.4360621	18.92453435
ENSRNOG00000007831	5	38632300	40608396	1.976096	12.89838081	7.908422001
ENSRNOG00000007839	7	68669009	69523142	0.854133	11.62767877	9.535745965
ENSRNOG00000007851	6	92532959	94129258	1.596299	14.41114337	9.605958955
ENSRNOG00000007866	4	161569943	163398181	1.828238	8.65700484	5.172397785
ENSRNOG00000007869	10	58118094	59358636	1.240542	17.20498617	12.74884231
ENSRNOG00000007874	4	145984273	147822078	1.837805	7.541657859	5.100295899
ENSRNOG00000007882	14	80120705	80141320	0.020615	5.277981448	5.277981448
ENSRNOG00000007892	5	4517538	6102523	1.584985	7.759932995	5.011275877
ENSRNOG00000007894	5	98483523	99834796	1.351273	6.650887014	5.265995932
ENSRNOG00000007900	4	56980503	57949719	0.969216	6.02390281	5.025839631
ENSRNOG00000007907	6	3466586	3666153	0.199567	36.92785311	32.89419004
ENSRNOG00000008001	5	127585053	128776993	1.19194	20.20531412	18.1934957
ENSRNOG00000008046	6	96741665	96983041	0.241376	5.529419373	5.317812467
ENSRNOG00000008051	6	126139386	127101212	0.961826	6.50211465	5.334323798
ENSRNOG00000008052	5	159907335	160350090	0.442755	5.962969194	5.235116917
ENSRNOG00000008055	5	23457456	24633842	1.176386	6.652518896	5.429544181
ENSRNOG00000008099	5	61869506	62831707	0.962201	27.00451247	22.12122774
ENSRNOG00000008135	3	111109487	113041349	1.931862	8.223323887	5.027466761
ENSRNOG00000008209	7	107438559	108930751	1.492192	6.997494691	5.013066357
ENSRNOG00000008236	5	28622006	30580636	1.95863	9.281022764	5.001437351
ENSRNOG00000008244	6	92622221	94588314	1.966093	9.098049694	5.002622815
ENSRNOG00000008247	7	31546604	32053242	0.506638	5.479459288	5.128042341
ENSRNOG00000008257	5	158649098	160537371	1.888273	8.26823027	5.088272819
ENSRNOG00000008278	8	32248636	32557144	0.308508	5.442734029	5.025844289
ENSRNOG00000008297	3	159158189	159946670	0.788481	7.856479299	5.114628622
ENSRNOG00000008298	5	117374278	118608927	1.234649	6.006619487	5.026476549
ENSRNOG00000008331	7	25318598	26684794	1.366196	7.492250566	5.98714141
ENSRNOG00000008345	5	164774970	164886230	0.11126	8.3553979	5.029014423
ENSRNOG00000008356	8	81391218	81535718	0.1445	5.96925128	5.61242987
ENSRNOG00000008365	10	83553809	84873408	1.319599	5.925298108	5.150602654
ENSRNOG00000008367	7	142122329	142338618	0.216289	5.594922593	5.037489961
ENSRNOG00000008374	14	85228837	85403300	0.174463	6.27940293	6.002121722
ENSRNOG00000008452	3	117639954	117742723	0.102769	5.089215346	5.025507173
ENSRNOG00000008463	4	21802692	23097097	1.294405	7.811952074	5.213361614
ENSRNOG00000008526	8	47645529	49566668	1.921139	9.749629766	5.115616414
ENSRNOG00000008533	7	114946302	115286848	0.340546	6.479127066	5.161740928

ENSRNOG00000008548	5	147461252	147904661	0.443409	6.121035314	5.008894744
ENSRNOG00000008553	5	164774970	165036791	0.261821	15.06658251	10.13968618
ENSRNOG00000008615	7	93149618	95070531	1.920913	10.59678298	5.846674387
ENSRNOG00000008619	5	164327164	164852780	0.525616	6.85411284	5.051592459
ENSRNOG00000008628	4	34780806	35615228	0.834422	22.01392141	18.60676577
ENSRNOG00000008641	15	18800841	20176441	1.3756	12.23107738	7.456910025
ENSRNOG00000008683	6	22779898	23645535	0.865637	12.5876121	8.480469281
ENSRNOG00000008693	5	147461252	148281667	0.820415	10.54833527	5.577209153
ENSRNOG00000008694	7	129949665	130876324	0.926659	8.057271626	5.260041624
ENSRNOG00000008716	14	85196317	85403300	0.206983	40.96664742	37.1125737
ENSRNOG00000008737	8	63080050	63270142	0.190092	7.095351136	6.095506274
ENSRNOG00000008757	8	39427741	40347139	0.919398	5.741666425	5.250794723
ENSRNOG00000008759	5	144073066	144242466	0.1694	6.296318126	5.115139072
ENSRNOG00000008788	6	100981526	102992484	2.010958	7.507054396	5.105624119
ENSRNOG00000008797	7	31305607	31907509	0.601902	5.072362059	5.066889979
ENSRNOG00000008806	6	23122999	23645535	0.522536	19.21206096	14.35045881
ENSRNOG00000008822	3	146092242	147098973	1.006731	16.95013858	12.41818863
ENSRNOG00000008869	4	29445699	30072561	0.626862	11.59838091	7.217476368
ENSRNOG00000008891	10	65382870	66011381	0.628511	5.671402348	5.541909402
ENSRNOG00000008922	5	61421530	61932976	0.511446	6.151950212	5.24982684
ENSRNOG00000008939	4	34752209	35482782	0.730573	32.22436702	27.22892175
ENSRNOG00000008942	6	23122999	23645535	0.522536	8.027671191	5.770702447
ENSRNOG00000008943	5	16964640	17575373	0.610733	6.236527906	5.060077057
ENSRNOG00000008990	8	13124065	13550621	0.426556	6.453409032	5.113289452
ENSRNOG00000009008	8	57474550	58913946	1.439396	6.117192055	5.021397766
ENSRNOG00000009039	6	47657683	48389284	0.731601	6.692894543	5.220824447
ENSRNOG00000009068	13	52519426	52653361	0.133935	5.549234473	5.545111912
ENSRNOG00000009073	13	52467056	52825583	0.358527	7.276716698	5.424809892
ENSRNOG00000009110	6	106827601	107306312	0.478711	7.8986057	5.548909045
ENSRNOG00000009125	15	83473143	83602177	0.129034	5.413500038	5.01736751
ENSRNOG00000009137	5	19115998	20264999	1.149001	7.487069298	5.130246056
ENSRNOG00000009149	8	28106680	28688563	0.581883	6.048355949	5.264255014
ENSRNOG00000009151	6	77206663	79167628	1.960965	6.239664753	5.068166593
ENSRNOG00000009166	6	127280601	127351195	0.070594	5.294666944	5.134283671
ENSRNOG00000009183	5	160449378	160662347	0.212969	6.386471669	5.501783275
ENSRNOG00000009193	8	68769618	69860607	1.090989	7.843118583	5.482416003
ENSRNOG00000009198	8	110610795	112583822	1.973027	7.025623786	5.00537019
ENSRNOG00000009199	3	82525561	82961170	0.435609	17.90037943	13.60326334
ENSRNOG00000009220	14	107293274	107726772	0.433498	6.882008162	5.522343661
ENSRNOG00000009253	8	27564990	28278046	0.713056	40.72557528	36.38418875
ENSRNOG00000009263	6	127200659	128257981	1.057322	9.70177508	5.031617788
ENSRNOG00000009290	3	67411534	67952243	0.540709	7.259317655	5.008111176
ENSRNOG00000009308	8	81535718	83224931	1.689213	7.655777288	5.084830212
ENSRNOG00000009325	5	153584463	154462997	0.878534	12.56437882	7.751270582
ENSRNOG00000009355	3	175569485	176870450	1.300965	7.540632703	5.161717611
ENSRNOG00000009382	3	56789064	57670368	0.881304	12.76092543	12.01828369

ENSRNOG00000009401	3	92944875	94803123	1.858248	10.54997279	5.956294193
ENSRNOG00000009411	4	84071541	85386287	1.314746	18.52050337	13.90584653
ENSRNOG00000009425	3	118659620	119074060	0.41444	5.787440574	5.709537132
ENSRNOG00000009431	15	85870389	86694699	0.82431	14.53829454	10.39042833
ENSRNOG00000009433	2	230204273	230553375	0.349102	7.477954999	5.246233776
ENSRNOG00000009439	8	84981634	86631556	1.649922	10.20408422	5.516001774
ENSRNOG00000009448	6	107403899	108192748	0.788849	7.019441523	5.149833139
ENSRNOG00000009465	2	182032580	183131316	1.098736	7.726095874	5.008707473
ENSRNOG00000009491	2	115492541	116889485	1.396944	5.159401319	5.013657259
ENSRNOG00000009512	15	56471414	57543705	1.072291	7.870394659	5.030673679
ENSRNOG00000009528	3	146092242	147098973	1.006731	11.07309251	8.020025577
ENSRNOG00000009539	7	109153195	111178548	2.025353	12.65108814	8.474152267
ENSRNOG00000009555	2	260504956	261679060	1.174104	6.527802775	5.272572202
ENSRNOG00000009563	7	143466351	143574783	0.108432	5.918022088	5.254045201
ENSRNOG00000009571	4	84073939	85655865	1.581926	7.855106387	5.138297553
ENSRNOG00000009613	8	90794410	91376022	0.581612	25.91199357	22.26103127
ENSRNOG00000009636	4	84490853	85655865	1.165012	21.4524452	16.71209124
ENSRNOG00000009694	15	20779446	21013826	0.23438	7.767241708	5.742832311
ENSRNOG00000009708	5	168464554	169599288	1.134734	13.81173053	9.092758445
ENSRNOG00000009724	5	61628737	62216820	0.588083	7.498381544	5.296661766
ENSRNOG00000009734	4	61697587	62808384	1.110797	13.79293592	9.44321267
ENSRNOG00000009756	7	123473768	124847447	1.373679	6.321758362	5.108537961
ENSRNOG00000009760	7	11750438	13680934	1.930496	6.130321103	5.060257452
ENSRNOG00000009772	8	35372792	35794042	0.42125	15.48205422	12.85573231
ENSRNOG00000009787	4	119137955	120574413	1.436458	8.96861681	5.133290599
ENSRNOG00000009797	5	56648846	57593697	0.944851	6.013442956	5.189558969
ENSRNOG00000009824	16	48478908	49677527	1.198619	7.141823895	5.21488689
ENSRNOG00000009878	8	122489538	123197486	0.707948	5.723496367	5.493317481
ENSRNOG00000009892	8	31218502	31696879	0.478377	7.530338598	5.144943215
ENSRNOG00000009893	X	917818	2037736	1.119918	6.6131631	6.386751164
ENSRNOG00000009919	15	93608979	93805040	0.196061	5.13633163	5.073479147
ENSRNOG00000009928	8	91642239	92541226	0.898987	5.742099173	5.104169439
ENSRNOG00000009983	5	126323296	127684290	1.360994	6.454073513	5.008891095
ENSRNOG00000009992	2	259284829	260608373	1.323544	9.473860636	5.056052936
ENSRNOG00000009993	8	36080855	36549047	0.468192	6.157196569	5.281382948
ENSRNOG00000010045	4	155123694	156221389	1.097695	7.366831029	5.207152637
ENSRNOG00000010050	3	111649822	112891277	1.241455	8.613581201	5.081298029
ENSRNOG00000010063	15	56522969	56560585	0.037616	5.430524085	5.059658833
ENSRNOG00000010076	13	52489086	52851580	0.362494	11.19269475	6.827326074
ENSRNOG00000010098	6	101126653	103059055	1.932402	10.30482967	5.476917483
ENSRNOG00000010104	3	148323989	149290192	0.966203	15.7814739	11.0460044
ENSRNOG00000010106	5	35800617	36111783	0.311166	13.37904786	8.701741264
ENSRNOG00000010111	6	135723803	136642546	0.918743	13.13220141	8.321336877
ENSRNOG00000010149	8	126306837	126595810	0.288973	37.08187777	33.55238466
ENSRNOG00000010164	3	7054335	7093197	0.038862	20.54673724	18.90829425
ENSRNOG00000010165	6	134894348	136882155	1.987807	7.485500654	5.226648747

ENSRNOG00000010169	5	135014399	135313694	0.299295	6.17405714	5.28238106
ENSRNOG00000010188	9	63038865	64332042	1.293177	5.755778832	5.038269312
ENSRNOG00000010196	8	121449946	122562918	1.112972	6.144740364	5.021311661
ENSRNOG00000010204	13	52908951	52972915	0.063964	11.78338697	6.96717575
ENSRNOG00000010214	10	83985440	85281862	1.296422	8.820869748	5.21831533
ENSRNOG00000010218	6	135187419	136952096	1.764677	9.350529713	5.071676833
ENSRNOG00000010234	5	19587031	20498173	0.911142	7.419269709	5.136127905
ENSRNOG00000010241	5	126257948	127684290	1.426342	9.938246941	5.471426192
ENSRNOG00000010258	4	144812669	146328177	1.515508	9.082398429	5.104597052
ENSRNOG00000010268	2	153664531	154165913	0.501382	20.00567971	17.08358187
ENSRNOG00000010274	2	165052287	166255068	1.202781	13.19522212	10.31327506
ENSRNOG00000010280	2	24242270	25241341	0.999071	11.79450743	6.918974026
ENSRNOG00000010284	4	98945772	100841057	1.895285	8.723416573	5.050078456
ENSRNOG00000010286	2	1506035	1784746	0.278711	6.607249296	5.187470676
ENSRNOG00000010296	15	32366565	33992205	1.62564	32.77499005	27.80989067
ENSRNOG00000010326	3	175579011	177336004	1.756993	22.24150908	19.11097694
ENSRNOG00000010357	13	55665863	56305379	0.639516	5.183805367	5.145358198
ENSRNOG00000010390	8	48337941	49626857	1.288916	8.384618853	5.377232366
ENSRNOG00000010412	5	61181685	61421530	0.239845	31.98688097	27.28136086
ENSRNOG00000010423	7	11750438	12898142	1.147704	19.28289931	16.42529412
ENSRNOG00000010457	6	110349305	111256735	0.90743	15.73648521	11.53612777
ENSRNOG00000010461	2	44874475	45095458	0.220983	6.313614449	5.104660183
ENSRNOG00000010463	4	57009217	58840505	1.831288	7.814744545	5.030962082
ENSRNOG00000010472	3	109880519	111780545	1.900026	11.59228984	6.640510768
ENSRNOG00000010473	4	147643437	148711631	1.068194	8.982836466	5.062958854
ENSRNOG00000010512	5	126335478	127226536	0.891058	7.378540635	5.445584695
ENSRNOG00000010516	15	2752580	4508284	1.755704	22.43221786	17.51281285
ENSRNOG00000010519	9	19167625	20409673	1.242048	10.90913797	6.259397392
ENSRNOG00000010538	3	148450735	148977061	0.526326	12.48022765	11.86347541
ENSRNOG00000010540	10	85155859	85281862	0.126003	15.48962129	11.110299
ENSRNOG00000010584	8	5042476	6890343	1.847867	8.176397821	5.066932786
ENSRNOG00000010592	9	19320952	20177809	0.856857	9.697493464	5.035930868
ENSRNOG00000010600	3	1982450	2463828	0.481378	10.68306058	5.695940894
ENSRNOG00000010602	8	5303784	6913654	1.60987	7.806435867	5.00703173
ENSRNOG00000010605	6	127280601	128440099	1.159498	19.961736	15.21099157
ENSRNOG00000010616	3	1982450	3301173	1.318723	9.149748587	5.082261124
ENSRNOG00000010624	2	23240429	24845311	1.604882	7.697111764	5.003821014
ENSRNOG00000010635	10	85977713	87133761	1.156048	14.3772071	9.485055638
ENSRNOG00000010649	2	82976414	83723090	0.746676	17.51398832	12.96686291
ENSRNOG00000010650	6	101225686	103158223	1.932537	10.91471036	5.949050037
ENSRNOG00000010659	3	118414846	119801686	1.38684	7.384060923	5.111807477
ENSRNOG00000010663	8	113750571	114668384	0.917813	12.59299929	8.216436792
ENSRNOG00000010664	1	141971214	143700543	1.729329	11.68831148	7.044440935
ENSRNOG00000010668	10	39620310	40205108	0.584798	5.375756589	5.261759675
ENSRNOG00000010699	8	96043346	96455521	0.412175	13.7371706	9.419802859
ENSRNOG00000010716	4	99668128	100254224	0.586096	6.066388671	5.016630478

ENSRNOG00000010735	5	139704547	140563342	0.858795	7.261638141	5.07202612
ENSRNOG00000010743	8	54692381	55476772	0.784391	25.33316882	20.58504951
ENSRNOG00000010750	6	51815209	53646266	1.831057	8.285183783	5.02814884
ENSRNOG00000010765	15	2752580	4496497	1.743917	7.369309438	5.548133111
ENSRNOG00000010777	5	18961894	21185132	2.223238	7.4334952	5.145611634
ENSRNOG00000010793	7	143676550	144251498	0.574948	7.495455282	5.41396369
ENSRNOG00000010794	7	113779030	115606804	1.827774	6.392368454	5.00884601
ENSRNOG00000010802	8	93587163	94720684	1.133521	6.948238551	6.064117183
ENSRNOG00000010812	3	63157783	64203088	1.045305	9.60460045	5.010873495
ENSRNOG00000010813	16	16889398	18440916	1.551518	12.25326692	7.32209282
ENSRNOG00000010819	2	127017282	127721927	0.704645	6.260081828	5.179456933
ENSRNOG00000010821	7	120312478	120566651	0.254173	23.0135784	22.40355658
ENSRNOG00000010839	10	86523948	87258608	0.73466	19.52314423	14.99125124
ENSRNOG00000010840	1	143374335	144388865	1.01453	6.219260338	5.067351124
ENSRNOG00000010872	6	135262612	136141209	0.878597	6.379013501	5.088915023
ENSRNOG00000010873	5	153584463	154462997	0.878534	13.74674787	9.644510956
ENSRNOG00000010880	4	132194284	132286683	0.092399	19.12172089	14.39842771
ENSRNOG00000010902	5	153584463	155023257	1.438794	10.06000589	5.310127633
ENSRNOG00000010911	8	112012872	112397087	0.384215	6.349179489	5.15150201
ENSRNOG00000010915	1	247066400	248414927	1.348527	10.79367218	6.015077423
ENSRNOG00000010919	4	146821012	148711631	1.890619	8.599596032	5.038930484
ENSRNOG00000010938	1	90583088	92201733	1.618645	8.489678915	5.161067363
ENSRNOG00000010940	8	112432298	112982722	0.550424	7.084166998	5.017679714
ENSRNOG00000010957	4	66752075	67779436	1.027361	20.54909565	15.85068929
ENSRNOG00000010960	2	79457560	80678484	1.220924	6.587455729	5.33189438
ENSRNOG00000010963	3	93088481	94938051	1.84957	14.71148675	10.12896909
ENSRNOG00000010964	1	136731958	137437446	0.705488	6.50478308	5.181105133
ENSRNOG00000011007	10	104721301	105746788	1.025487	19.6958157	16.22624443
ENSRNOG00000011025	2	242742079	244235995	1.493916	6.861586292	5.018305059
ENSRNOG00000011027	8	112449719	112939355	0.489636	11.24826553	6.496761654
ENSRNOG00000011032	2	23395471	23916695	0.521224	16.85980826	12.26430779
ENSRNOG00000011053	2	236553964	236796163	0.242199	36.04223374	31.39066362
ENSRNOG00000011057	2	117954353	119964963	2.01061	9.005297704	5.095924574
ENSRNOG00000011074	1	183723915	184688737	0.964822	8.860309341	5.153278006
ENSRNOG00000011101	6	53104347	53628779	0.524432	5.534587316	5.019782955
ENSRNOG00000011130	1	184015677	184113606	0.097929	20.7713368	19.2043978
ENSRNOG00000011141	6	127612590	127948709	0.336119	6.155658079	5.862918381
ENSRNOG00000011142	19	38483046	40155323	1.672277	24.54757039	19.6848814
ENSRNOG00000011145	4	84327790	85894687	1.566897	7.556549457	5.048769978
ENSRNOG00000011150	2	23398430	24427758	1.029328	6.070293328	5.062186938
ENSRNOG00000011167	15	23744882	25032863	1.287981	8.050633726	5.213069316
ENSRNOG00000011193	8	82136429	83291950	1.155521	12.49523731	7.902113929
ENSRNOG00000011202	3	175569485	177336004	1.766519	12.2806309	7.403396321
ENSRNOG00000011214	7	120102226	120634534	0.532308	5.907735178	5.144947319
ENSRNOG00000011228	8	54562947	56215877	1.65293	7.966575192	5.117813036
ENSRNOG00000011238	2	157227189	157899133	0.671944	5.76717469	5.035549644

ENSRNOG00000011241	8	103295718	104188408	0.89269	12.50257511	7.557425311
ENSRNOG00000011276	16	3121957	4801630	1.679673	9.497853467	5.073835138
ENSRNOG00000011280	5	105513816	107075686	1.56187	6.639308811	5.061293563
ENSRNOG00000011293	16	32555221	33248617	0.693396	6.119699236	5.133135016
ENSRNOG00000011300	18	3073779	4140861	1.067082	22.45782444	17.84986576
ENSRNOG00000011310	1	51724470	52756862	1.032392	16.88273725	12.26331703
ENSRNOG00000011316	15	45992305	47534337	1.542032	8.562396578	5.125633658
ENSRNOG00000011321	9	12646217	13226552	0.580335	7.878866417	5.002144538
ENSRNOG00000011332	5	144464288	144677561	0.213273	5.522217774	5.066402646
ENSRNOG00000011348	8	95605975	96837899	1.231924	6.835193359	5.079297293
ENSRNOG00000011357	10	55232944	56492284	1.25934	21.74366379	16.80582677
ENSRNOG00000011379	3	112007792	113506976	1.499184	8.562354899	5.006139691
ENSRNOG00000011419	6	107555274	108475440	0.920166	20.35010538	15.36739087
ENSRNOG00000011425	5	73280092	75151209	1.871117	11.74631842	7.030099826
ENSRNOG00000011439	1	281301063	282655369	1.354306	9.638478523	5.384835708
ENSRNOG00000011446	8	127608484	127814906	0.206422	20.28727951	15.77166579
ENSRNOG00000011451	1	90583088	92423347	1.840259	12.66875627	7.969289577
ENSRNOG00000011459	10	104623198	105746788	1.12359	7.617570526	5.435182526
ENSRNOG00000011467	3	10286072	11469420	1.183348	6.450532911	5.110204542
ENSRNOG00000011478	8	112025206	112939355	0.914149	10.67954086	7.376775891
ENSRNOG00000011517	9	19610102	20374492	0.76439	16.55569222	11.78580784
ENSRNOG00000011526	1	126517261	127207540	0.690279	7.518398157	5.022365712
ENSRNOG00000011533	19	15857654	16361786	0.504132	23.6555625	18.73185047
ENSRNOG00000011535	19	49392177	50471462	1.079285	8.426557475	6.529405024
ENSRNOG00000011572	6	135723803	137123046	1.399243	11.54244646	6.63650415
ENSRNOG00000011584	1	90583088	92262649	1.679561	18.72990426	13.95363769
ENSRNOG00000011592	15	32366565	33992205	1.62564	9.035450013	5.327469141
ENSRNOG00000011618	19	31312771	33313703	2.000932	8.57817376	5.015618185
ENSRNOG00000011634	15	46202394	47347807	1.145413	6.408004874	5.128771452
ENSRNOG00000011652	3	118415392	120224935	1.809543	13.57451579	8.848057268
ENSRNOG00000011653	4	147643437	149191157	1.54772	7.237341114	5.129457836
ENSRNOG00000011669	2	237326389	238508308	1.181919	9.609158728	5.047957304
ENSRNOG00000011675	1	62119547	62947893	0.828346	6.699417041	5.281297245
ENSRNOG00000011718	4	156285406	157341929	1.056523	12.26762075	7.673971342
ENSRNOG00000011728	19	15885911	17227177	1.341266	6.864203141	5.116184316
ENSRNOG00000011775	16	32571451	33307649	0.736198	5.869697144	5.315782904
ENSRNOG00000011782	19	9535972	10163185	0.627213	16.17009122	11.74486216
ENSRNOG00000011784	9	12796705	13546909	0.750204	7.438492557	5.757487093
ENSRNOG00000011808	4	85037532	86500319	1.462787	6.296711011	5.010348201
ENSRNOG00000011820	8	112421727	112438790	0.017063	5.206908864	5.201314607
ENSRNOG00000011846	10	86582936	87973021	1.390085	6.837871267	5.051362044
ENSRNOG00000011871	9	5051078	5234532	0.183454	5.508424483	5.258661693
ENSRNOG00000011884	3	11105191	11935216	0.830025	11.27166192	8.007761519
ENSRNOG00000011909	8	104382800	105504728	1.121928	8.237771161	5.062019134
ENSRNOG00000011910	5	154255650	155201708	0.946058	11.36701482	6.451729633
ENSRNOG00000011918	6	108144351	108436649	0.292298	14.68431826	9.997321854

ENSRNOG00000011925	8	83459209	84274464	0.815255	5.982299942	5.006200552
ENSRNOG00000011937	2	33230468	35100534	1.870066	8.118031091	5.350662994
ENSRNOG00000011944	4	80320759	81490170	1.169411	11.96902718	7.738344613
ENSRNOG00000011945	1	114122850	114366944	0.244094	5.232635588	5.028901725
ENSRNOG00000011964	6	108144351	108436649	0.292298	6.31071727	5.468622348
ENSRNOG00000011984	17	8532342	9154404	0.622062	24.04669552	20.42433049
ENSRNOG00000012007	19	9535972	10385099	0.849127	8.761405998	5.046108959
ENSRNOG00000012012	15	46572565	48225218	1.652653	6.176685995	5.129462911
ENSRNOG00000012051	3	118659620	120610634	1.951014	12.38692195	7.732317881
ENSRNOG00000012055	1	141193568	143081982	1.888414	10.34417673	6.081878472
ENSRNOG00000012060	2	180729070	182007875	1.278805	6.780408992	5.048310905
ENSRNOG00000012067	1	228277819	229574469	1.29665	41.98001827	37.53129277
ENSRNOG00000012083	10	105490696	105746788	0.256092	20.34270855	16.76089979
ENSRNOG00000012085	6	108495171	108823867	0.328696	15.23816946	10.6575268
ENSRNOG00000012087	16	49331250	49841803	0.510553	7.261255787	5.022055347
ENSRNOG00000012110	1	267040675	267545288	0.504613	5.857623936	5.19448941
ENSRNOG00000012134	10	93524831	94571733	1.046902	16.96343969	11.97212659
ENSRNOG00000012141	6	135723803	137123046	1.399243	7.205088636	5.711740181
ENSRNOG00000012146	6	110670356	111384331	0.713975	35.46059877	31.51852502
ENSRNOG00000012151	3	118636966	120515095	1.878129	10.73045696	6.065715521
ENSRNOG00000012162	10	55573072	57114938	1.541866	6.444648856	5.168630449
ENSRNOG00000012192	7	143676550	144403745	0.727195	11.33048379	6.725349959
ENSRNOG00000012196	1	250089333	251264399	1.175066	7.3724941	5.018298089
ENSRNOG00000012204	5	144791054	145847391	1.056337	7.961325877	5.069647808
ENSRNOG00000012219	5	147592962	148686069	1.093107	7.005043029	5.114390291
ENSRNOG00000012237	8	56215336	56858104	0.642768	6.512954905	5.393996169
ENSRNOG00000012247	4	119622905	120574413	0.951508	9.484242534	5.149902388
ENSRNOG00000012271	19	9535972	10153241	0.617269	6.252344896	5.096869785
ENSRNOG00000012273	15	51900913	53125953	1.22504	6.868382971	5.008583899
ENSRNOG00000012274	5	159411834	160745111	1.333277	7.425843827	5.088491417
ENSRNOG00000012315	5	159527493	160750828	1.223335	13.99067337	9.062918062
ENSRNOG00000012337	4	86128685	87315215	1.18653	5.443253005	5.14031459
ENSRNOG00000012410	2	189059177	190868467	1.80929	6.715182465	5.039648929
ENSRNOG00000012440	15	47448508	48760922	1.312414	7.213338734	5.087166805
ENSRNOG00000012450	19	48883182	49321083	0.437901	12.20994217	9.274970054
ENSRNOG00000012480	8	104391784	105504728	1.112944	10.57294491	5.573503171
ENSRNOG00000012486	9	38366384	39700964	1.33458	26.28476282	21.36152136
ENSRNOG00000012549	2	250490023	250729247	0.239224	32.73238508	28.46424893
ENSRNOG00000012559	3	1906266	3301173	1.394907	6.256905641	5.039446142
ENSRNOG00000012616	5	140228608	140607422	0.378814	6.038022513	5.054575507
ENSRNOG00000012629	9	37516596	39319881	1.803285	7.659946469	5.09631622
ENSRNOG00000012641	1	266826962	268397414	1.570452	10.13340323	5.16999532
ENSRNOG00000012652	6	111673913	112074342	0.400429	36.54091967	31.61249734
ENSRNOG00000012684	1	263268427	264185949	0.917522	20.89421846	15.99936404
ENSRNOG00000012692	1	59143289	59658395	0.515106	5.859156487	5.070315082
ENSRNOG00000012698	1	126504010	127393775	0.889765	7.588501741	5.091334845

ENSRNOG00000012708	9	20712607	20883053	0.170446	5.912603117	5.628435551
ENSRNOG00000012719	1	90841542	92688554	1.847012	7.58434434	5.052223221
ENSRNOG00000012721	19	32937684	34654401	1.716717	9.499729324	5.083678932
ENSRNOG00000012724	5	127468916	127909239	0.440323	5.125199517	5.004745416
ENSRNOG00000012752	19	493932	1212128	0.718196	6.375480408	5.823108731
ENSRNOG00000012759	9	30390801	31830738	1.439937	8.301799867	5.068558607
ENSRNOG00000012760	2	189059177	190665089	1.605912	17.86847844	13.13978704
ENSRNOG00000012782	1	238481458	239660733	1.179275	12.64799686	7.778559249
ENSRNOG00000012799	2	54341009	55421661	1.080652	5.967238537	5.067637662
ENSRNOG00000012811	3	110690666	111929086	1.23842	6.419464065	5.048135952
ENSRNOG00000012815	9	45149714	45954332	0.804618	14.56953824	9.58075659
ENSRNOG00000012853	19	493932	1212128	0.718196	5.754969056	5.038890046
ENSRNOG00000012860	19	33097027	34206687	1.10966	15.85092458	11.30819436
ENSRNOG00000012872	1	235187636	235465919	0.278283	5.810542132	5.045131593
ENSRNOG00000012880	3	154070146	154734855	0.664709	7.403529595	5.253257368
ENSRNOG00000012892	2	225339500	225519038	0.179538	5.468592846	5.11635776
ENSRNOG00000012928	19	33390416	34216253	0.825837	17.53853221	12.54821672
ENSRNOG00000012934	16	82784329	83450640	0.666311	6.726112287	5.6145327
ENSRNOG00000012937	19	39182937	40155323	0.972386	12.12117303	7.354344833
ENSRNOG00000012942	9	1249678	2854928	1.60525	13.26764228	8.274551849
ENSRNOG00000012959	9	52950695	54731954	1.781259	9.164113715	5.026193577
ENSRNOG00000012960	3	1906266	2287158	0.380892	5.472092705	5.049064639
ENSRNOG00000012972	4	148432704	149325503	0.892799	5.98200494	5.011730804
ENSRNOG00000012975	4	99298945	101271957	1.973012	7.952331363	5.117756692
ENSRNOG00000012988	1	59039080	59746027	0.706947	6.138823864	5.019335931
ENSRNOG00000012989	5	148102730	149009927	0.907197	12.81974657	8.194301416
ENSRNOG00000012995	X	65050076	66789343	1.739267	11.99913157	7.133449136
ENSRNOG00000013009	1	102724805	103240184	0.515379	22.76372976	18.53464593
ENSRNOG00000013011	2	256764604	258383452	1.618848	9.886110914	5.119727595
ENSRNOG00000013024	16	22316424	23523935	1.207511	6.303771707	5.043356115
ENSRNOG00000013039	14	80536842	82316705	1.779863	5.277709135	5.139457855
ENSRNOG00000013045	2	139670675	141161041	1.490366	6.406297313	5.015952179
ENSRNOG00000013053	1	233990428	234737555	0.747127	8.153378655	5.105066306
ENSRNOG00000013147	16	6179896	7338578	1.158682	15.86155474	11.20696125
ENSRNOG00000013172	3	80028136	80464449	0.436313	5.145703849	5.135911559
ENSRNOG00000013202	1	20774248	22018276	1.244028	6.786987188	5.069087061
ENSRNOG00000013215	16	46497752	48069032	1.57128	15.88598642	11.54511142
ENSRNOG00000013229	8	96044782	97174229	1.129447	6.972653604	5.000583186
ENSRNOG00000013248	16	46821798	48458720	1.636922	6.734528244	5.027474498
ENSRNOG00000013251	4	64650280	66385619	1.735339	7.552153376	5.060489347
ENSRNOG00000013260	16	18801577	19395443	0.593866	19.63603931	14.66827698
ENSRNOG00000013279	1	263989952	264247051	0.257099	24.69883085	20.51978373
ENSRNOG00000013301	19	493932	1212128	0.718196	25.78702068	21.52339129
ENSRNOG00000013312	13	56274860	56689935	0.415075	6.533946615	5.091069851
ENSRNOG00000013351	1	3553883	4632188	1.078305	7.532936958	5.02301688
ENSRNOG00000013353	15	24928293	25939310	1.011017	13.84848595	9.189256343

ENSRNOG00000013358	1	161719562	163290200	1.570638	8.036637584	5.006059711
ENSRNOG00000013409	2	225781755	225940276	0.158521	11.95832982	8.058738196
ENSRNOG00000013415	9	41017218	41397259	0.380041	5.763919364	5.128851099
ENSRNOG00000013419	8	58513722	60514963	2.001241	14.46561397	10.31805962
ENSRNOG00000013452	3	94795418	96155490	1.360072	7.156923601	5.21261131
ENSRNOG00000013480	16	46847261	48458720	1.611459	13.01113553	8.03342246
ENSRNOG00000013493	8	59413156	59859013	0.445857	5.11565361	5.054868932
ENSRNOG00000013515	5	148964697	150381548	1.416851	7.813974038	5.017472536
ENSRNOG00000013519	1	260197958	261284946	1.086988	6.672732247	5.335185446
ENSRNOG00000013521	2	21793266	22131300	0.338034	23.51670171	19.4149794
ENSRNOG00000013541	16	22210372	23854113	1.643741	13.2216187	8.246509859
ENSRNOG00000013557	9	73725499	74985722	1.260223	11.88357194	6.981605268
ENSRNOG00000013572	2	164074632	164866496	0.791864	6.10598124	5.366403347
ENSRNOG00000013578	9	14414250	15560572	1.146322	12.26584093	7.304649258
ENSRNOG00000013589	4	149090373	149670698	0.580325	14.52959627	9.790702752
ENSRNOG00000013618	16	82708729	83758296	1.049567	6.206726994	5.025776222
ENSRNOG00000013634	8	127449476	128861293	1.411817	7.913915396	5.262826184
ENSRNOG00000013673	2	21677915	22131300	0.453385	6.575123279	5.033306581
ENSRNOG00000013692	2	126773566	128055391	1.281825	6.765790614	5.011091019
ENSRNOG00000013712	4	114914595	115921367	1.006772	10.63833253	5.733184177
ENSRNOG00000013719	2	218188517	218794597	0.60608	5.970750634	5.172637387
ENSRNOG00000013729	4	65346880	66571177	1.224297	6.693097623	5.182314353
ENSRNOG00000013738	18	51752175	51991851	0.239676	17.47029012	15.66417408
ENSRNOG00000013747	14	81209471	82316705	1.107234	6.556816078	5.234126657
ENSRNOG00000013748	9	14370651	15026522	0.655871	11.04370981	6.06633152
ENSRNOG00000013767	1	78804020	80722636	1.918616	8.857465102	5.30013977
ENSRNOG00000013770	1	150350406	150980617	0.630211	20.96364574	16.13182465
ENSRNOG00000013790	2	164074632	164866496	0.791864	5.917874098	5.000531776
ENSRNOG00000013820	5	171532785	172730494	1.197709	8.996721552	5.604248459
ENSRNOG00000013877	1	128714952	128976585	0.261633	5.846737309	5.55438263
ENSRNOG00000013884	16	22933532	23470219	0.536687	5.424585017	5.012133073
ENSRNOG00000013895	3	1906266	3598877	1.692611	6.819730282	5.091685244
ENSRNOG00000013916	15	44461094	45525709	1.064615	9.656978913	5.983892494
ENSRNOG00000013928	17	27185958	27969657	0.783699	9.689305481	5.430648483
ENSRNOG00000013945	1	83306478	84988059	1.681581	13.93526269	8.96251321
ENSRNOG00000013946	9	45587142	47297000	1.709858	8.352353047	5.05976298
ENSRNOG00000013954	5	155792998	156269507	0.476509	12.68715672	8.462166082
ENSRNOG00000013965	1	256725191	258297419	1.572228	7.38655377	5.004368377
ENSRNOG00000013972	5	148102730	149009927	0.907197	9.093209567	5.567894049
ENSRNOG00000013973	3	11477870	12381436	0.903566	42.79501634	39.18486584
ENSRNOG00000013994	1	20760791	22283402	1.522611	12.10681983	7.204223988
ENSRNOG00000014002	2	206580410	207481833	0.901423	23.37239423	18.45206245
ENSRNOG00000014004	1	29137482	29550987	0.413505	7.633903614	5.235475465
ENSRNOG00000014019	17	23293341	23672331	0.37899	5.837133228	5.030340868
ENSRNOG00000014027	10	57981632	59770583	1.788951	12.58530683	8.561016434
ENSRNOG00000014030	1	128678664	129386409	0.707745	13.14216763	10.65309867

ENSRNOG00000014034	3	22732662	24239429	1.506767	26.90617963	22.46742987
ENSRNOG00000014055	16	23900486	23933301	0.032815	6.277409471	5.063594731
ENSRNOG00000014059	2	250836179	251625711	0.789532	6.966977067	5.17246297
ENSRNOG00000014075	15	108000590	109450255	1.449665	26.46612499	21.59782315
ENSRNOG00000014139	2	128536731	128718035	0.181304	6.400345076	5.248227734
ENSRNOG00000014165	17	27359957	28381370	1.021413	8.462287131	5.065040927
ENSRNOG00000014168	8	127234541	128991645	1.757104	10.75935143	5.797214647
ENSRNOG00000014178	2	121854797	123046183	1.191386	33.37612904	29.04280056
ENSRNOG00000014179	10	13399207	14723590	1.324383	5.97145669	5.046400357
ENSRNOG00000014197	5	159571504	160750828	1.179324	12.11556303	7.196379188
ENSRNOG00000014230	3	112773817	114117345	1.343528	14.22048706	9.434633444
ENSRNOG00000014256	1	78938776	80915184	1.976408	7.223937714	5.002518934
ENSRNOG00000014264	17	23221254	23731179	0.509925	5.475148034	5.042697252
ENSRNOG00000014305	5	159902790	159922867	0.020077	5.304423307	5.304423307
ENSRNOG00000014322	5	160885297	161730886	0.845589	6.271659723	5.083809835
ENSRNOG00000014352	5	144970744	145525225	0.554481	32.52566852	28.524641
ENSRNOG00000014354	10	94914612	95552960	0.638348	13.95326532	9.115866571
ENSRNOG00000014357	5	144970744	146105139	1.134395	12.20494424	7.2500882
ENSRNOG00000014365	5	58796834	59828254	1.03142	8.136830474	5.471897399
ENSRNOG00000014371	19	50898592	52339985	1.441393	8.263199517	5.213100829
ENSRNOG00000014378	9	46081061	46891556	0.810495	5.51774444	5.006875754
ENSRNOG00000014398	15	48325142	49205328	0.880186	12.40204366	7.737530045
ENSRNOG00000014450	1	4878061	6310136	1.432075	6.167194397	5.058408854
ENSRNOG00000014459	18	51613190	52001331	0.388141	6.683219276	5.168942885
ENSRNOG00000014461	19	55244415	55460809	0.216394	7.124308289	5.459027651
ENSRNOG00000014464	16	84843216	85552596	0.70938	27.17468239	22.39304982
ENSRNOG00000014496	10	61906656	63557537	1.650881	7.838691319	5.222365027
ENSRNOG00000014509	15	41260254	42240066	0.979812	17.16729565	12.19369956
ENSRNOG00000014526	16	82850143	83572168	0.722025	8.940108473	5.186343513
ENSRNOG00000014532	3	154070146	154794363	0.724217	8.407995586	5.582126517
ENSRNOG00000014550	2	54341009	55293911	0.952902	9.264201531	5.543328389
ENSRNOG00000014595	6	136805787	138561791	1.756004	9.95091347	5.713160739
ENSRNOG00000014603	15	41307360	42054624	0.747264	28.21112643	24.56312769
ENSRNOG00000014605	16	84861409	85540551	0.679142	35.4511348	31.46901701
ENSRNOG00000014617	4	99854012	101443065	1.589053	12.52573835	8.26081157
ENSRNOG00000014634	7	120802372	121808853	1.006481	11.5770343	6.808106575
ENSRNOG00000014642	5	171916951	172683047	0.766096	6.776460572	5.292247709
ENSRNOG00000014654	2	226837323	227241172	0.403849	8.494997127	5.588303823
ENSRNOG00000014660	2	226992789	227772219	0.77943	9.254113866	5.676137265
ENSRNOG00000014668	19	36486378	36860620	0.374242	6.468295574	5.135897717
ENSRNOG00000014684	2	189059177	190665089	1.605912	9.165521411	5.723192289
ENSRNOG00000014702	17	21385302	21748084	0.362782	12.82861063	7.983698941
ENSRNOG00000014719	8	31196939	31580692	0.383753	25.44776806	21.62537952
ENSRNOG00000014742	10	62638494	63046292	0.407798	31.39738263	30.94602028
ENSRNOG00000014766	5	57152405	59051436	1.899031	11.60015881	6.994197953
ENSRNOG00000014798	3	80028136	81173206	1.14507	28.18635408	25.03854293

ENSRNOG00000014816	1	246351157	247770284	1.419127	9.136408932	5.018895737
ENSRNOG00000014851	9	87332021	89303797	1.971776	7.84560555	5.060569825
ENSRNOG00000014866	13	24778523	26389929	1.611406	19.37794733	14.38606664
ENSRNOG00000014876	9	118843977	119832319	0.988342	7.276216117	5.025673832
ENSRNOG00000014936	1	212772082	214738181	1.966099	13.38177057	9.184132031
ENSRNOG00000014953	10	57986641	59770583	1.783942	5.44348408	5.000251883
ENSRNOG00000014996	1	2102033	2811754	0.709721	5.879583783	5.006729167
ENSRNOG00000015058	1	163012978	163515704	0.502726	22.9557866	18.1879313
ENSRNOG00000015068	5	57275312	58783689	1.508377	6.667502726	5.039335878
ENSRNOG00000015071	1	69415748	70133026	0.717278	11.48029097	6.636922473
ENSRNOG00000015072	5	76219692	76476364	0.256672	51.42989909	49.33489736
ENSRNOG00000015093	14	6631225	7150080	0.518855	5.472347912	5.025846075
ENSRNOG00000015113	18	15927958	17190650	1.262692	8.492256233	5.311524018
ENSRNOG00000015179	19	36486378	37838079	1.351701	15.31943655	10.49374879
ENSRNOG00000015220	1	261576830	261892136	0.315306	6.703254974	5.072907174
ENSRNOG00000015225	18	50586017	52130877	1.54486	8.512024385	5.115754129
ENSRNOG00000015226	2	202000399	202997508	0.997109	5.752505755	5.08572843
ENSRNOG00000015231	9	84670803	86479535	1.808732	9.48752433	5.45428143
ENSRNOG00000015260	2	251884757	252746566	0.861809	5.510542621	5.032475804
ENSRNOG00000015268	1	246311050	247770284	1.459234	6.1228976	5.146064778
ENSRNOG00000015288	17	63218622	64101839	0.883217	21.29994865	17.45282963
ENSRNOG00000015329	10	94910635	96175887	1.265252	7.660626029	5.003053217
ENSRNOG00000015346	9	81982669	82637788	0.655119	5.818764323	5.209072655
ENSRNOG00000015347	2	202319007	203845925	1.526918	17.73932435	13.60730549
ENSRNOG00000015354	9	63990765	65936068	1.945303	10.94806893	6.072282261
ENSRNOG00000015359	3	154805020	155648888	0.843868	8.036540254	5.236443468
ENSRNOG00000015368	1	188729393	190236961	1.507568	6.473048955	5.001975803
ENSRNOG00000015396	3	7760759	9584524	1.823765	13.47015042	10.03531355
ENSRNOG00000015425	2	251704448	253095306	1.390858	6.077669758	5.011949311
ENSRNOG00000015438	19	14116715	15786304	1.669589	11.09284491	6.105018206
ENSRNOG00000015439	9	111899135	112431059	0.531924	5.269963521	5.007157059
ENSRNOG00000015503	1	123706339	124369796	0.663457	6.136688624	5.961012559
ENSRNOG00000015520	1	141193568	142321469	1.127901	9.549689389	5.327624657
ENSRNOG00000015546	18	15927958	17190650	1.262692	9.335325123	5.165334415
ENSRNOG00000015551	1	7416631	7783658	0.367027	25.83049114	21.56427474
ENSRNOG00000015560	1	163202749	164155578	0.952829	6.071369901	5.13244052
ENSRNOG00000015578	10	55503411	56492284	0.988873	13.6464332	11.29720415
ENSRNOG00000015581	4	100331393	101268248	0.936855	10.44858415	5.598852147
ENSRNOG00000015583	7	120102226	121923277	1.821051	8.2870157	5.047684461
ENSRNOG00000015589	4	117988558	118072132	0.083574	5.43297383	5.051847943
ENSRNOG00000015637	3	149974075	150091067	0.116992	6.554085814	5.329512271
ENSRNOG00000015654	2	53713991	54300632	0.586641	5.881797742	5.188027046
ENSRNOG00000015660	1	7431879	8124727	0.692848	18.1209307	13.44506635
ENSRNOG00000015666	19	20676127	22449510	1.773383	9.385902938	5.19662107
ENSRNOG00000015696	3	149847127	149974075	0.126948	19.26328724	14.54430433
ENSRNOG00000015713	1	176321413	178326991	2.005578	13.462806	8.56165549

ENSRNOG00000015727	1	261470403	262793213	1.32281	9.701363115	5.035432176
ENSRNOG00000015733	9	119283428	119830996	0.547568	6.209215744	5.072917821
ENSRNOG00000015741	7	131605610	133276342	1.670732	11.64230764	6.644713654
ENSRNOG00000015763	4	116951621	118072132	1.120511	15.83683236	11.34634912
ENSRNOG00000015768	4	117295168	117408654	0.113486	5.219546089	5.018438645
ENSRNOG00000015783	1	189239293	191347582	2.108289	10.29551184	5.38507702
ENSRNOG00000015848	4	179006991	180443109	1.436118	13.22974616	8.520242603
ENSRNOG00000015902	1	203191747	204505118	1.313371	21.19078922	16.34086055
ENSRNOG00000015928	3	154909722	155394165	0.484443	22.28872992	18.36865117
ENSRNOG00000015948	1	77763410	79677920	1.91451	9.985775805	5.055687817
ENSRNOG00000015956	1	69415748	70133026	0.717278	10.54384166	6.301854945
ENSRNOG00000015962	5	165563465	167358478	1.795013	9.036328848	5.042951852
ENSRNOG00000015972	1	106842502	107921020	1.078518	12.01809325	7.201607479
ENSRNOG00000015987	2	244142378	245112565	0.970187	7.36690609	5.100385422
ENSRNOG00000016013	1	188200563	189160564	0.960001	6.571378447	5.126078573
ENSRNOG00000016062	3	149289810	150091067	0.801257	9.031480891	5.320044143
ENSRNOG00000016085	8	49172555	49714211	0.541656	5.761989148	5.084954967
ENSRNOG00000016102	1	208743247	209221412	0.478165	6.417402635	5.069348466
ENSRNOG00000016108	19	41445787	41777817	0.33203	7.710171591	6.713007455
ENSRNOG00000016156	7	120802372	121229582	0.42721	11.77157584	7.138755447
ENSRNOG00000016180	5	25548862	25788965	0.240103	5.512261893	5.069983291
ENSRNOG00000016196	9	117940656	119935776	1.99512	8.937448579	5.171671367
ENSRNOG00000016217	17	63178025	64127033	0.949008	18.87350149	15.49944254
ENSRNOG00000016220	3	11181094	12998751	1.817657	12.43939826	7.53276353
ENSRNOG00000016221	8	48990583	49518449	0.527866	6.2085067	5.143067547
ENSRNOG00000016224	19	51811345	53006509	1.195164	11.43298999	6.98381973
ENSRNOG00000016229	9	15422831	16504296	1.081465	5.36206969	5.15624337
ENSRNOG00000016247	9	88696376	89319201	0.622825	11.72766593	7.076656395
ENSRNOG00000016315	9	15607428	16664288	1.05686	9.828248843	6.21702482
ENSRNOG00000016330	5	25320633	26202878	0.882245	26.48026368	21.5395842
ENSRNOG00000016371	1	22424484	22791272	0.366788	10.36705311	5.374144395
ENSRNOG00000016408	2	186387238	186524198	0.13696	6.220972292	5.556534772
ENSRNOG00000016417	18	197675	1663260	1.465585	13.77928997	8.843358398
ENSRNOG00000016465	7	126509787	127450847	0.94106	5.631398458	5.175749385
ENSRNOG00000016469	8	48710964	50077280	1.366316	8.965994439	5.062441054
ENSRNOG00000016470	9	99416730	100449418	1.032688	6.639905194	5.0734156
ENSRNOG00000016479	19	36565459	37838079	1.27262	17.82352731	13.29580547
ENSRNOG00000016496	1	151157252	152453045	1.295793	32.06247096	27.14059202
ENSRNOG00000016519	17	19000221	19003573	0.003352	5.702797415	5.663272171
ENSRNOG00000016534	17	78884406	79255278	0.370872	23.44516164	20.78399812
ENSRNOG00000016544	2	25523471	25815891	0.29242	6.454925431	5.072059439
ENSRNOG00000016545	10	13383609	14794654	1.411045	16.62728401	11.72321402
ENSRNOG00000016573	1	163333562	164179229	0.845667	6.110069711	5.018313923
ENSRNOG00000016593	1	256486973	257451084	0.964111	7.337433134	5.100878072
ENSRNOG00000016632	18	15232702	15691472	0.45877	22.74315093	20.19016651
ENSRNOG00000016640	9	90980563	93163672	2.183109	10.04976492	5.247605071

ENSRNOG00000016645	16	6528593	7183892	0.655299	5.789682419	5.01579844
ENSRNOG00000016653	9	93595999	94669200	1.073201	9.574604513	7.106571996
ENSRNOG00000016655	9	15607428	16664288	1.05686	14.64394676	10.62145496
ENSRNOG00000016681	18	63835881	64048776	0.212895	7.167987805	5.75699492
ENSRNOG00000016716	17	85819327	86939909	1.120582	9.426273198	5.021552953
ENSRNOG00000016717	1	106269982	108335463	2.065481	10.56314134	5.565503839
ENSRNOG00000016768	3	176470398	177336004	0.865606	20.84986053	15.99612837
ENSRNOG00000016774	10	14109097	14770582	0.661485	32.29167215	29.21745413
ENSRNOG00000016847	8	50039390	51119644	1.080254	12.9808656	8.179945035
ENSRNOG00000016866	9	49319918	50200973	0.881055	20.2759972	15.28415894
ENSRNOG00000016870	3	161341095	161934352	0.593257	6.718151106	6.091628451
ENSRNOG00000016873	17	85819327	87141391	1.322064	12.62903024	7.633714789
ENSRNOG00000016879	18	63319771	63909908	0.590137	6.342099034	5.056853275
ENSRNOG00000016891	17	9734109	10578003	0.843894	5.383473257	5.051787006
ENSRNOG00000016892	16	18801577	20206023	1.404446	7.289385328	5.357640697
ENSRNOG00000016910	3	11181094	12663540	1.482446	7.936955481	5.254822891
ENSRNOG00000016930	1	72085662	73503545	1.417883	8.650161932	5.150509814
ENSRNOG00000016936	5	173154085	173358345	0.20426	5.814993617	5.228070457
ENSRNOG00000016939	15	50816183	52036682	1.220499	11.42298452	7.756656839
ENSRNOG00000016965	3	120897805	122060138	1.162333	13.26344561	8.281744189
ENSRNOG00000016971	19	41486648	42040337	0.553689	6.691870854	5.191911615
ENSRNOG00000016976	10	13620578	15437678	1.8171	9.550571392	5.129395037
ENSRNOG00000017051	16	6306523	7768199	1.461676	14.75363273	9.98659282
ENSRNOG00000017066	4	157766906	158314660	0.547754	5.75066575	5.264945828
ENSRNOG00000017073	5	58252676	59990203	1.737527	15.17027644	11.75453495
ENSRNOG00000017097	1	204383603	205043470	0.659867	8.276493607	5.016931964
ENSRNOG00000017151	8	50039390	51045109	1.005719	6.528969275	5.116672987
ENSRNOG00000017172	3	13297890	13699893	0.402003	5.586257648	5.373664386
ENSRNOG00000017178	19	41051308	41842044	0.790736	25.17621109	20.57202191
ENSRNOG00000017193	8	61164524	62228487	1.063963	6.203184901	5.078876884
ENSRNOG00000017208	8	61343063	62391613	1.04855	11.39759123	7.095052254
ENSRNOG00000017237	9	114921838	116602640	1.680802	10.11076238	5.330267571
ENSRNOG00000017243	1	210492612	211906360	1.413748	6.062556905	5.020066054
ENSRNOG00000017286	15	42534096	43273447	0.739351	26.06122142	21.10556426
ENSRNOG00000017295	3	8884843	9640341	0.755498	6.176617988	5.038453749
ENSRNOG00000017321	1	277476138	279288776	1.812638	7.95506087	5.454855861
ENSRNOG00000017324	5	76219692	77283763	1.064071	19.45892579	14.80682117
ENSRNOG00000017340	9	65901026	67100168	1.199142	8.343040485	5.066217901
ENSRNOG00000017369	16	6528593	7079678	0.551085	6.543465907	5.270148861
ENSRNOG00000017373	15	50816183	52468851	1.652668	10.2249873	6.391813975
ENSRNOG00000017403	1	197002996	199003004	2.000008	7.675181387	5.031372354
ENSRNOG00000017408	1	169544434	170366698	0.822264	7.332935853	5.113421974
ENSRNOG00000017426	5	141074313	142059169	0.984856	16.00048378	12.60684713
ENSRNOG00000017468	1	79418083	81178891	1.760808	11.349412	6.462080956
ENSRNOG00000017491	9	65909747	66827195	0.917448	5.599761533	5.019702073
ENSRNOG00000017528	5	167108163	168075930	0.967767	7.678764666	5.729765115

ENSRNOG00000017539	3	161341095	161934352	0.593257	7.954685541	6.453700058
ENSRNOG00000017577	17	31037258	31552005	0.514747	42.26937566	38.70785957
ENSRNOG00000017608	1	165110282	165603931	0.493649	5.048272175	5.027661858
ENSRNOG00000017609	1	169544434	171037394	1.49296	7.432633815	5.097835768
ENSRNOG00000017619	1	237363225	238442540	1.079315	14.80055999	9.803083445
ENSRNOG00000017621	1	196794513	198748592	1.954079	9.075750661	5.03684164
ENSRNOG00000017644	17	75183541	76801851	1.61831	9.48089234	5.084749124
ENSRNOG00000017669	2	199259422	200755768	1.496346	7.178738975	5.452835431
ENSRNOG00000017693	5	166756959	168118725	1.361766	6.949463006	5.001265495
ENSRNOG00000017720	4	118155883	119111048	0.955165	8.764979993	5.736126937
ENSRNOG00000017741	17	75554667	76667522	1.112855	5.750871521	5.053570216
ENSRNOG00000017752	2	30322537	31199083	0.876546	24.06512919	19.72690284
ENSRNOG00000017753	1	79302148	81303306	2.001158	10.24546095	6.190777058
ENSRNOG00000017777	3	150270438	151521853	1.251415	11.26918816	6.622074882
ENSRNOG00000017791	17	54649465	55078790	0.429325	5.502389822	5.044650128
ENSRNOG00000017836	9	15715251	16959718	1.244467	12.63671845	8.321502038
ENSRNOG00000017841	19	10210023	10985061	0.775038	11.26065231	6.338842064
ENSRNOG00000017851	1	98146280	98948150	0.80187	6.406176908	5.087262898
ENSRNOG00000017882	17	76419571	76667419	0.247848	22.41520238	17.42659125
ENSRNOG00000017887	5	135014399	136194437	1.180038	12.68465106	8.486922102
ENSRNOG00000017895	5	166876679	168207917	1.331238	20.44927644	15.78114568
ENSRNOG00000017911	4	71795984	73064876	1.268892	8.946656386	5.255623668
ENSRNOG00000017915	10	57467101	57604433	0.137332	5.463859831	5.041477088
ENSRNOG00000017933	17	76874186	78046321	1.172135	6.020166435	5.004041672
ENSRNOG00000017976	1	164233587	165028063	0.794476	5.572304881	5.201073531
ENSRNOG00000017988	17	23672331	24283074	0.610743	5.296723389	5.038706166
ENSRNOG00000018003	2	24861450	25156935	0.295485	16.56857314	11.93903544
ENSRNOG00000018005	3	113282550	115251057	1.968507	8.905368584	5.002216458
ENSRNOG00000018069	15	33697121	33869563	0.172442	17.20534569	14.35682489
ENSRNOG00000018076	2	199240788	200755768	1.51498	20.30997297	15.76183683
ENSRNOG00000018095	10	88176538	88924952	0.748414	6.781315901	5.333938152
ENSRNOG00000018126	5	69235397	70727886	1.492489	8.079003892	5.223542448
ENSRNOG00000018145	3	8060064	9151732	1.091668	5.321284848	5.22619772
ENSRNOG00000018162	9	81452578	82822222	1.369644	7.314845839	5.015863349
ENSRNOG00000018200	17	88527324	90155526	1.628202	7.518486337	5.006664615
ENSRNOG00000018205	3	120748234	122063727	1.315493	7.833899546	5.400321073
ENSRNOG00000018220	2	199147986	200935389	1.787403	9.278215973	5.213219615
ENSRNOG00000018228	19	56304997	58058683	1.753686	16.47204952	11.65457977
ENSRNOG00000018236	2	209487777	209744370	0.256593	27.48298949	25.13271729
ENSRNOG00000018336	1	213471114	215136596	1.665482	7.517222137	5.206133867
ENSRNOG00000018338	5	173170668	173358345	0.187677	13.72066818	9.692610333
ENSRNOG00000018349	3	120936431	122587554	1.651123	14.3134015	11.24720015
ENSRNOG00000018412	14	82704996	84001037	1.296041	23.53393274	19.28860654
ENSRNOG00000018463	5	135014399	136323648	1.309249	10.10801777	6.032334574
ENSRNOG00000018484	5	135014399	136194437	1.180038	7.403365634	5.014514166
ENSRNOG00000018486	3	9015183	9142049	0.126866	5.099101874	5.099101874

ENSRNOG00000018491	3	120897805	122567478	1.669673	8.358839257	5.756854742
ENSRNOG00000018507	4	118155883	119111048	0.955165	11.8261882	7.189565743
ENSRNOG00000018521	9	93313080	94365472	1.052392	8.019714675	5.264527771
ENSRNOG00000018557	3	161393809	161970399	0.57659	7.246355408	5.307875163
ENSRNOG00000018567	3	120897805	122665050	1.767245	9.084988796	5.026150296
ENSRNOG00000018648	18	61958940	62722235	0.763295	5.389497838	5.000774013
ENSRNOG00000018649	3	161812224	162244520	0.432296	20.86288964	17.89091992
ENSRNOG00000018683	1	206856464	207949773	1.093309	7.167346591	5.064459952
ENSRNOG00000018689	8	61164524	62391613	1.227089	18.02067772	13.24136395
ENSRNOG00000018730	1	79677920	81178891	1.500971	8.128267797	5.244564091
ENSRNOG00000018741	9	17020826	17658995	0.638169	6.34256573	5.469265079
ENSRNOG00000018749	5	135582619	136204682	0.622063	6.498833326	5.351833725
ENSRNOG00000018816	8	61343063	63026246	1.683183	8.628949835	5.006781297
ENSRNOG00000018830	9	44369898	45046140	0.676242	25.67226215	20.85500966
ENSRNOG00000018841	10	15837388	15906937	0.069549	5.266042527	5.079753485
ENSRNOG00000018867	5	157729116	158120835	0.391719	6.108672163	5.021328516
ENSRNOG00000018876	3	3821980	4780434	0.958454	6.979839327	5.040201783
ENSRNOG00000018904	9	100283289	100989261	0.705972	16.50394057	11.7333857
ENSRNOG00000018928	1	83821232	85546865	1.725633	6.292498713	5.138065215
ENSRNOG00000018951	X	112141554	113342880	1.201326	7.183926405	6.107742373
ENSRNOG00000018953	1	79751763	81178891	1.427128	10.40135066	5.811463562
ENSRNOG00000018992	18	37435573	38747063	1.31149	10.40022777	5.870547208
ENSRNOG00000019012	9	100549813	100988757	0.438944	5.338380376	5.088544185
ENSRNOG00000019044	2	200232470	200356799	0.124329	5.432091143	5.241574588
ENSRNOG00000019050	1	252686667	253158998	0.472331	37.93199442	33.44779386
ENSRNOG00000019074	10	56242795	57799207	1.556412	5.616764768	5.126748781
ENSRNOG00000019075	10	88710714	88851118	0.140404	5.428877539	5.093303963
ENSRNOG00000019086	X	112700383	113626447	0.926064	8.494057781	5.329886463
ENSRNOG00000019103	1	197021526	198937330	1.915804	8.425597378	5.001954733
ENSRNOG00000019108	17	6408705	6998010	0.589305	12.65881079	7.817261872
ENSRNOG00000019112	1	191188697	192641882	1.453185	10.34222282	5.722069833
ENSRNOG00000019118	3	161812224	162244520	0.432296	12.79489359	9.520704924
ENSRNOG00000019132	1	99971678	100992725	1.021047	5.294095744	5.135309768
ENSRNOG00000019143	19	56259515	57861456	1.601941	13.49680462	8.585627563
ENSRNOG00000019174	10	14109097	16084466	1.975369	6.837079159	5.051472204
ENSRNOG00000019205	19	56874957	57676684	0.801727	6.219507725	5.251722292
ENSRNOG00000019211	2	205560383	207192832	1.632449	13.33012206	9.148729077
ENSRNOG00000019219	4	157572142	158671507	1.099365	10.62878592	5.676443407
ENSRNOG00000019228	16	19422189	21329432	1.907243	7.672868826	5.261283327
ENSRNOG00000019243	9	81603794	82822222	1.218428	7.037989174	5.196959534
ENSRNOG00000019249	1	142417034	143654830	1.237796	6.06727978	5.015153648
ENSRNOG00000019339	3	15137453	16148064	1.010611	8.424256424	5.039272355
ENSRNOG00000019394	16	19537641	21329432	1.791791	5.809510583	5.418445162
ENSRNOG00000019412	2	187545902	187935765	0.389863	11.25338228	7.904004755
ENSRNOG00000019416	1	80948576	81178891	0.230315	30.20709931	25.29265206
ENSRNOG00000019434	19	43968628	44742707	0.774079	8.660243261	5.034666282

ENSRNOG00000019464	1	224834408	225031036	0.196628	5.724362172	5.06246078
ENSRNOG00000019476	9	96906108	97287291	0.381183	5.218874927	5.025166864
ENSRNOG00000019477	10	56270290	58030935	1.760645	8.892398186	5.405790484
ENSRNOG00000019482	19	10602874	12649933	2.047059	9.934972803	5.056553794
ENSRNOG00000019485	1	199817392	200274279	0.456887	6.416989609	5.089777675
ENSRNOG00000019508	2	200316793	202252554	1.935761	6.818006361	5.021407522
ENSRNOG00000019519	17	6408705	6719587	0.310882	22.83022873	18.61530821
ENSRNOG00000019532	1	100352007	101204731	0.852724	5.41436649	5.076379606
ENSRNOG00000019578	1	84485008	85459036	0.974028	5.494112528	5.02702381
ENSRNOG00000019590	2	187545902	187935765	0.389863	14.61516423	11.54449419
ENSRNOG00000019598	9	17283204	17658995	0.375791	9.138512263	6.674045033
ENSRNOG00000019609	5	136402556	136819896	0.41734	6.406953643	5.574853839
ENSRNOG00000019667	1	170814446	172900949	2.086503	8.977154974	5.046956654
ENSRNOG00000019680	8	116681627	117603463	0.921836	19.82574576	15.02549595
ENSRNOG00000019689	4	157889893	158564431	0.674538	7.189569772	5.033037055
ENSRNOG00000019702	1	85159889	85459036	0.299147	5.210732552	5.050586808
ENSRNOG00000019704	9	81603794	82822222	1.218428	8.080117697	5.950712438
ENSRNOG00000019716	4	158771883	158974113	0.20223	5.979030706	5.121216674
ENSRNOG00000019718	16	7619832	9153782	1.53395	6.553019611	5.1476665
ENSRNOG00000019741	16	20215376	20691649	0.476273	18.79125691	15.27536442
ENSRNOG00000019751	1	171041730	172804774	1.763044	15.07395197	10.14140621
ENSRNOG00000019752	9	17559736	18688614	1.128878	8.142692012	5.04770637
ENSRNOG00000019757	19	37016014	37996466	0.980452	9.140152527	5.091830101
ENSRNOG00000019791	19	58070881	58613000	0.542119	5.556919702	5.248336263
ENSRNOG00000019832	1	219844030	220983019	1.138989	25.09866158	20.35868487
ENSRNOG00000019873	1	224694210	225190623	0.496413	34.40708615	29.96431586
ENSRNOG00000019875	18	27946807	28746613	0.799806	7.493473166	5.566991896
ENSRNOG00000019885	2	205560383	207481833	1.92145	17.95623093	13.50404199
ENSRNOG00000019902	1	166672823	167702597	1.029774	28.78536886	24.07058444
ENSRNOG00000019926	9	97407027	99289087	1.88206	7.366642234	5.436448499
ENSRNOG00000019935	1	198783684	199782174	0.99849	5.694823425	5.315474412
ENSRNOG00000019948	3	151330208	152849176	1.518968	11.44724615	6.677144907
ENSRNOG00000019960	1	197916661	198774684	0.858023	34.62397312	30.42661656
ENSRNOG00000019963	9	16933146	18070350	1.137204	9.196603188	5.580360459
ENSRNOG00000019978	16	7423992	9329870	1.905878	7.758877608	5.015001108
ENSRNOG00000019986	4	51308615	52919379	1.610764	13.73578828	9.177705795
ENSRNOG00000019995	18	28578210	28753081	0.174871	5.580401011	5.092110146
ENSRNOG00000019999	1	81127364	81522930	0.395566	5.764363501	5.130877691
ENSRNOG00000020010	1	197916661	198197329	0.280668	5.213652733	5.155380277
ENSRNOG00000020028	18	29677237	31236727	1.55949	6.287615137	5.042519888
ENSRNOG00000020056	10	88758926	89828454	1.069528	8.504517622	5.010151613
ENSRNOG00000020083	9	98361028	99382880	1.021852	5.927445319	5.042291401
ENSRNOG00000020084	18	29526456	31372168	1.845712	7.722697921	5.010354586
ENSRNOG00000020102	1	86863159	87941642	1.078483	21.25011268	17.24399534
ENSRNOG00000020164	1	214730284	215558073	0.827789	5.69297228	5.069883566
ENSRNOG00000020182	1	197530677	199083032	1.552355	12.93800901	8.166821713

ENSRNOG00000020194	9	98366227	99350925	0.984698	10.87311217	6.157469485
ENSRNOG00000020202	1	224374513	226053892	1.679379	18.26499829	13.83357812
ENSRNOG00000020244	5	172942005	173692520	0.750515	6.705614181	5.928333988
ENSRNOG00000020284	8	116549241	118352021	1.80278	11.39952278	6.459295345
ENSRNOG00000020295	5	172942005	173692520	0.750515	37.6581898	33.96732651
ENSRNOG00000020304	1	266826962	267097337	0.270375	13.37763706	9.957204358
ENSRNOG00000020318	1	99921627	101204731	1.283104	17.32401661	12.4499107
ENSRNOG00000020344	19	38483046	40155323	1.672277	15.1714146	10.21867798
ENSRNOG00000020351	19	38381985	39999346	1.617361	6.328430668	5.122072898
ENSRNOG00000020360	2	211479367	212460274	0.980907	11.47571961	7.008343852
ENSRNOG00000020379	19	39585542	39699780	0.114238	6.14738807	5.624071895
ENSRNOG00000020391	19	38381985	40155323	1.773338	13.90799967	9.670404084
ENSRNOG00000020411	1	199528882	200274279	0.745397	17.7464026	13.07526797
ENSRNOG00000020424	1	202442468	202907163	0.464695	7.570477116	5.102076852
ENSRNOG00000020443	1	99946302	101204731	1.258429	14.45883816	11.43219737
ENSRNOG00000020455	1	220530357	221669718	1.139361	7.069681258	5.112443871
ENSRNOG00000020532	1	215355968	217080283	1.724315	11.50739088	6.903914738
ENSRNOG00000020533	1	201194045	201604404	0.410359	11.39108239	7.873723225
ENSRNOG00000020541	10	14660514	16160148	1.499634	8.226489065	5.003460287
ENSRNOG00000020557	1	87040261	87941642	0.901381	12.56271406	8.054310434
ENSRNOG00000020594	10	14912641	16086497	1.173856	11.02070344	6.13051548
ENSRNOG00000020623	1	100199769	101204731	1.004962	13.45387134	10.29720168
ENSRNOG00000020624	1	201371659	201996973	0.625314	51.10649501	46.98787327
ENSRNOG00000020630	10	15540981	16182662	0.641681	5.656602605	5.036135558
ENSRNOG00000020698	10	88802310	89540093	0.737783	7.273829803	5.081849609
ENSRNOG00000020702	1	226465528	226927498	0.46197	19.57867002	17.34538202
ENSRNOG00000020736	1	216117689	217080283	0.962594	9.354366718	5.067114489
ENSRNOG00000020775	1	82661708	84104477	1.442769	9.634035605	5.585677436
ENSRNOG00000020777	1	88849229	89196364	0.347135	5.740169014	5.041904708
ENSRNOG00000020833	8	117618111	119313109	1.694998	11.02708954	6.591161967
ENSRNOG00000020837	10	90011566	90474781	0.463215	9.188056283	5.072907666
ENSRNOG00000020865	1	217431879	217541111	0.109232	5.428238344	5.086932271
ENSRNOG00000020877	10	89164509	90919781	1.755272	7.674956719	5.0086459
ENSRNOG00000020879	10	89090605	90488671	1.398066	10.45237115	5.460906013
ENSRNOG00000020936	8	117909623	119742105	1.832482	8.131881679	5.040635257
ENSRNOG00000020941	1	88849229	89894606	1.045377	8.229594536	5.009167938
ENSRNOG00000020948	8	118120783	119905692	1.784909	15.10965031	10.82833118
ENSRNOG00000020953	1	227431634	227678478	0.246844	16.95679935	16.10192544
ENSRNOG00000021000	1	220970869	222408562	1.437693	6.229820629	5.383635283
ENSRNOG00000021009	1	88849229	89196364	0.347135	7.169853469	6.557085958
ENSRNOG00000021013	1	227151742	228834811	1.683069	10.96792303	6.386320934
ENSRNOG00000021054	1	221233868	221776662	0.542794	5.939308899	5.073955323
ENSRNOG00000021061	1	220724345	222613390	1.889045	8.135038881	5.091097772
ENSRNOG00000021084	1	227900292	229155864	1.255572	5.851798623	5.016935998
ENSRNOG00000021091	8	118655787	119742105	1.086318	21.29944173	16.6082782
ENSRNOG00000021129	1	89101761	90751381	1.64962	8.471452525	5.188447887

ENSRNOG00000021133	1	90280970	90651749	0.370779	6.423539008	5.052907635
ENSRNOG00000021137	1	90052063	90280970	0.228907	6.147815942	5.310633757
ENSRNOG00000021156	1	221349368	222976634	1.627266	14.20739085	9.757443618
ENSRNOG00000021185	2	198037733	198942587	0.904854	11.2396339	6.414447834
ENSRNOG00000021209	2	198064253	198919543	0.85529	11.51520325	6.91542714
ENSRNOG00000021295	3	170620671	170687553	0.066882	5.754075484	5.305529278
ENSRNOG00000021323	2	87618350	89188035	1.569685	6.387797985	5.082119144
ENSRNOG00000021347	14	17697900	18699658	1.001758	7.222239005	5.110869895
ENSRNOG00000021355	5	166817214	168207917	1.390703	6.910113917	5.490557742
ENSRNOG00000021379	19	42097604	42244719	0.147115	20.51317928	16.0144066
ENSRNOG00000021399	11	31283608	31722429	0.438821	5.209430277	5.107431685
ENSRNOG00000021412	10	70072706	70439212	0.366506	32.51304464	29.14048024
ENSRNOG00000021424	10	103682531	104433643	0.751112	12.56058467	7.582475428
ENSRNOG00000021437	5	155792998	156090189	0.297191	6.146437905	5.158820628
ENSRNOG00000021452	X	13198426	14951469	1.753043	11.64043275	6.765483602
ENSRNOG00000021469	11	69130790	70194873	1.064083	7.777716453	5.058750304
ENSRNOG00000021470	X	13198426	14951469	1.753043	13.6190889	8.66989586
ENSRNOG00000021474	1	98375006	99536175	1.161169	28.2204283	23.45800004
ENSRNOG00000021492	5	147116122	148271277	1.155155	20.08916119	16.36391054
ENSRNOG00000021517	19	43879357	44742707	0.86335	6.358421266	5.045017026
ENSRNOG00000021524	11	29929667	30981770	1.052103	11.07898308	7.268830165
ENSRNOG00000021536	10	86363390	86518520	0.15513	5.210651492	5.008784766
ENSRNOG00000021555	11	30765018	30981770	0.216752	63.97191734	62.93386
ENSRNOG00000021560	3	170042728	170242981	0.200253	5.243472844	5.028084225
ENSRNOG00000021693	16	49650837	49998977	0.34814	23.62972096	19.22124348
ENSRNOG00000021694	X	64698494	66507458	1.808964	15.73385008	11.38392965
ENSRNOG00000021702	5	8575000	9953522	1.378522	12.94897277	8.056107014
ENSRNOG00000021704	5	57815148	59824439	2.009291	7.12910979	5.141812945
ENSRNOG00000021712	15	38726899	40432134	1.705235	6.424808314	5.141707755
ENSRNOG00000021726	16	49469094	49971144	0.50205	26.1413665	21.46143322
ENSRNOG00000021748	X	64698494	65218553	0.520059	20.90649722	17.57486761
ENSRNOG00000021758	4	56500685	57879328	1.378643	9.69034699	5.098508513
ENSRNOG00000021763	1	256696233	257082007	0.385774	6.898406219	5.041051738
ENSRNOG00000021780	10	70027055	70591035	0.56398	7.951462568	5.102182336
ENSRNOG00000021793	8	46430688	48371799	1.941111	8.591358883	5.42591958
ENSRNOG00000021808	19	24274372	24682550	0.408178	5.939376909	5.024265831
ENSRNOG00000021831	15	41199301	42475370	1.276069	7.828560457	5.026592749
ENSRNOG00000021839	8	6071615	6890343	0.818728	14.25013821	9.286296513
ENSRNOG00000021855	4	56410420	57683828	1.273408	11.19761252	6.232929787
ENSRNOG00000021916	1	252658758	253281026	0.622268	10.61466798	5.687601633
ENSRNOG00000021960	13	93551789	93858351	0.306562	22.66457998	20.73157175
ENSRNOG00000021984	13	93544093	94266497	0.722404	18.27358054	14.71028715
ENSRNOG00000022084	8	108082225	108922095	0.83987	14.34453135	9.356436307
ENSRNOG00000022107	20	1216735	2533639	1.316904	9.046292323	5.110290083
ENSRNOG00000022162	3	13297890	14473683	1.175793	10.21407029	5.243202475
ENSRNOG00000022171	12	36276781	36906695	0.629914	9.573849359	6.439386633

ENSRNOG00000022199	5	137999162	138403528	0.404366	7.331441737	5.186432952
ENSRNOG00000022242	14	16500397	17603087	1.10269	17.88564058	12.90173436
ENSRNOG00000022268	7	125025015	125967977	0.942962	5.397456651	5.083573061
ENSRNOG00000022273	1	235598235	236553920	0.955685	17.54507853	12.60206291
ENSRNOG00000022323	5	13548588	15264275	1.715687	13.00221588	8.075549629
ENSRNOG00000022329	13	91988517	92380542	0.392025	18.54485303	14.15389139
ENSRNOG00000022354	5	172942005	173692520	0.750515	5.313017752	5.176956711
ENSRNOG00000022356	2	95539061	97463492	1.924431	8.060520683	5.078854275
ENSRNOG00000022387	13	91988517	93108144	1.119627	9.355350534	5.077491191
ENSRNOG00000022507	7	134977789	136634651	1.656862	8.828201386	5.096330782
ENSRNOG00000022570	7	135285121	135807253	0.522132	19.54809769	15.40624863
ENSRNOG00000022576	9	105530129	105719348	0.189219	43.53421504	40.37159052
ENSRNOG00000022601	5	57848949	59315406	1.466457	9.943050258	6.166034012
ENSRNOG00000022609	9	15305749	16480959	1.17521	17.31486061	13.53749268
ENSRNOG00000022673	1	220470538	222152246	1.681708	7.519423063	5.129931929
ENSRNOG00000022694	5	169253397	169680278	0.426881	6.696091927	5.285351467
ENSRNOG00000022727	3	120173873	120224935	0.051062	5.570673846	5.570673846
ENSRNOG00000022760	15	56759523	58062725	1.303202	18.25081423	13.73379556
ENSRNOG00000022791	6	77679019	79596564	1.917545	6.031829724	5.005164759
ENSRNOG00000022800	9	92247240	93557402	1.310162	8.684204057	5.036021276
ENSRNOG00000022802	7	120102226	120854099	0.751873	8.653399658	5.16332092
ENSRNOG00000022804	9	14810042	15415883	0.605841	5.71958867	5.174699302
ENSRNOG00000022845	8	107053000	107921881	0.868881	17.94754486	13.09612916
ENSRNOG00000022857	14	100320624	101115143	0.794519	13.36344497	9.254335175
ENSRNOG00000022896	7	122986697	124981010	1.994313	8.455849677	5.185451557
ENSRNOG00000022932	7	123537762	124755724	1.217962	41.60327074	38.84927025
ENSRNOG00000022999	8	108541933	110601333	2.0594	10.56659429	5.579860438
ENSRNOG00000023034	18	51658954	52001331	0.342377	6.143927334	5.284165133
ENSRNOG00000023053	1	34708892	35709304	1.000412	9.240801676	5.718926452
ENSRNOG00000023065	4	149846567	150582701	0.736134	12.8436982	8.010886721
ENSRNOG00000023089	9	49822350	51226917	1.404567	11.15540124	6.305992398
ENSRNOG00000023109	20	10346816	11926457	1.579641	10.05422289	5.109578371
ENSRNOG00000023116	6	55947988	57882441	1.934453	22.97395491	18.03979668
ENSRNOG00000023143	10	56821958	57866219	1.044261	27.16851818	23.15423705
ENSRNOG00000023214	8	107973649	109748917	1.775268	13.15563588	8.391480044
ENSRNOG00000023274	1	127955911	128803610	0.847699	12.38105101	7.570249069
ENSRNOG00000023299	14	3187318	4840701	1.653383	12.84532793	7.987770917
ENSRNOG00000023318	1	220944531	221499364	0.554833	6.780246478	5.171464903
ENSRNOG00000023348	5	61362052	63222012	1.85996	7.843488135	5.211444509
ENSRNOG00000023366	12	22997731	24605991	1.60826	10.37314519	5.620886454
ENSRNOG00000023400	11	67191513	68767357	1.575844	11.1642277	6.385917199
ENSRNOG00000023404	2	240140502	240169560	0.029058	5.406941623	5.285084339
ENSRNOG00000023455	5	135014399	135959225	0.944826	8.147161557	5.185238276
ENSRNOG00000023456	7	2519922	3138865	0.618943	5.279061244	5.124655845
ENSRNOG00000023457	2	244162371	245984525	1.822154	6.470159635	5.018846312
ENSRNOG00000023458	X	130662443	131357027	0.694584	6.099908165	5.280839065

ENSRNOG00000023463	11	67192371	68754781	1.56241	16.87291607	11.91459164
ENSRNOG00000023476	10	103869323	104721301	0.851978	18.06374899	13.12095365
ENSRNOG00000023484	14	2131504	3560996	1.429492	7.906860123	5.100731706
ENSRNOG00000023492	18	1279007	2460529	1.181522	20.6104838	15.62989418
ENSRNOG00000023549	1	3492183	4713978	1.221795	6.535396064	5.292706228
ENSRNOG00000023576	9	49545108	51120070	1.574962	13.47048326	8.493558722
ENSRNOG00000023614	16	18801577	20206023	1.404446	7.263885745	5.276904575
ENSRNOG00000023628	10	88827682	89836464	1.008782	11.53976226	6.580490656
ENSRNOG00000023633	8	58825302	60093518	1.268216	8.830683839	5.754049119
ENSRNOG00000023643	12	30004619	30951867	0.947248	6.0971583	5.05096688
ENSRNOG00000023683	10	76292391	76787535	0.495144	5.498985274	5.018817309
ENSRNOG00000023700	16	19045929	19168111	0.122182	5.377781752	5.1100823
ENSRNOG00000023720	8	30650687	30965169	0.314482	5.789668526	5.099080942
ENSRNOG00000023753	1	53303069	53967909	0.66484	5.728025288	5.061906336
ENSRNOG00000023814	4	155220613	156221389	1.000776	6.635916529	5.02966841
ENSRNOG00000023824	7	64190095	64586858	0.396763	6.236267382	5.349821969
ENSRNOG00000023837	2	21812106	23422233	1.610127	11.08206653	6.23226677
ENSRNOG00000023841	15	6106553	6234879	0.128326	28.73753369	24.41503977
ENSRNOG00000023851	2	203198129	204286039	1.08791	8.659866016	5.224924466
ENSRNOG00000023874	3	112960013	113031004	0.070991	18.06500106	14.04053174
ENSRNOG00000023920	19	25418988	25915742	0.496754	16.92418979	12.04979617
ENSRNOG00000023968	1	106845507	107841409	0.995902	6.957556189	5.021351849
ENSRNOG00000023991	16	82758097	83784456	1.026359	6.500409942	5.212544584
ENSRNOG00000024036	1	87317431	89081730	1.764299	7.621161217	5.522962494
ENSRNOG00000024066	18	11558	866566	0.855008	9.734849182	7.129563996
ENSRNOG00000024073	1	212620175	214313215	1.69304	16.1768252	11.27970863
ENSRNOG00000024111	17	26683327	27835625	1.152298	5.678196116	5.189085138
ENSRNOG00000024115	2	54335514	55341280	1.005766	20.0772646	15.12056387
ENSRNOG00000024210	10	11465198	12813947	1.348749	8.286479964	5.04030468
ENSRNOG00000024266	1	88849229	89515209	0.66598	14.40905818	10.37070776
ENSRNOG00000024277	12	15204106	16176263	0.972157	13.20444316	8.719978008
ENSRNOG00000024346	8	54114274	55932913	1.818639	8.020441194	5.286141288
ENSRNOG00000024372	6	18084646	18602735	0.518089	18.16825934	16.11079226
ENSRNOG00000024429	1	122210482	123859932	1.64945	6.478507103	5.110562492
ENSRNOG00000024445	10	11394816	11855892	0.461076	10.62283458	5.837046297
ENSRNOG00000024460	1	125899912	126654291	0.754379	7.661465468	5.253466186
ENSRNOG00000024525	6	17913046	18602735	0.689689	13.21295275	8.265037734
ENSRNOG00000024530	1	188667461	190492675	1.825214	17.25262909	12.50536626
ENSRNOG00000024533	4	129519875	129656883	0.137008	5.853079071	5.366917367
ENSRNOG00000024557	10	96556907	98095038	1.538131	10.81371144	6.127877811
ENSRNOG00000024563	3	111399469	112892200	1.492731	11.97574439	7.205520312
ENSRNOG00000024577	7	11367429	13152989	1.78556	10.33554311	5.427675559
ENSRNOG00000024595	3	54125792	55520201	1.394409	7.477186066	5.31033126
ENSRNOG00000024601	20	7294514	8089117	0.794603	6.493724934	5.12292509
ENSRNOG00000024632	13	88390938	89633150	1.242212	8.261342274	5.410726198
ENSRNOG00000024651	6	42100522	42767885	0.667363	19.62435888	16.25107564

ENSRNOG00000024693	3	171697505	173761683	2.064178	10.8022829	5.813931688
ENSRNOG00000024711	10	101560280	103038555	1.478275	10.37646632	5.486758158
ENSRNOG00000024757	8	12635562	13156045	0.520483	8.040284557	5.612620901
ENSRNOG00000024824	7	112692540	114083973	1.391433	11.54324842	7.294520637
ENSRNOG00000024825	13	73424561	73821830	0.397269	38.81831317	35.66314768
ENSRNOG00000024839	20	30642068	31286058	0.64399	7.225898206	5.132025635
ENSRNOG00000024924	11	71431989	72834007	1.402018	10.76892794	5.902157331
ENSRNOG00000024955	7	29938697	30330392	0.391695	7.354065047	5.301161307
ENSRNOG00000024998	7	89358647	89564680	0.206033	5.991010409	5.063141919
ENSRNOG00000025025	2	225754296	226820590	1.066294	7.220229447	5.161307287
ENSRNOG00000025130	3	110664978	112479154	1.814176	8.324295238	5.072452696
ENSRNOG00000025140	7	108049424	109465838	1.416414	11.72953395	6.794057258
ENSRNOG00000025141	3	141010802	142152698	1.141896	8.695191877	5.058770649
ENSRNOG00000025245	1	218106426	219285316	1.17889	15.77062539	11.06666361
ENSRNOG00000025273	9	115707615	116435969	0.728354	20.33633445	16.93320431
ENSRNOG00000025285	2	26963102	27942955	0.979853	6.48518405	5.40978321
ENSRNOG00000025324	18	62265291	63089514	0.824223	5.632801116	5.224612538
ENSRNOG00000025360	3	110690666	111929086	1.23842	6.159821561	5.04312156
ENSRNOG00000025375	1	164592711	166515568	1.922857	7.547367504	5.014217601
ENSRNOG00000025404	11	55022520	55225321	0.202801	11.85138946	8.535582092
ENSRNOG00000025423	11	82344283	83615474	1.271191	12.61674187	7.688844256
ENSRNOG00000025494	14	43249678	43952683	0.703005	8.328474932	5.090346509
ENSRNOG00000025503	19	51990007	52319541	0.329534	6.221046956	5.022504081
ENSRNOG00000025528	7	105693987	107208090	1.514103	15.34402024	10.35712565
ENSRNOG00000025551	7	73992649	75901925	1.909276	18.07488283	13.40142612
ENSRNOG00000025608	2	180912556	182871061	1.958505	13.06705928	8.128930108
ENSRNOG00000025612	12	49624981	50912126	1.287145	35.16869303	30.26200976
ENSRNOG00000025615	15	27056913	28265579	1.208666	28.63579944	25.99571802
ENSRNOG00000025644	1	234311666	234737555	0.425889	6.518124448	5.173383753
ENSRNOG00000025669	10	103697468	104721301	1.023833	5.574775031	5.079348072
ENSRNOG00000025808	9	17563584	18052250	0.488666	9.443961919	6.070442368
ENSRNOG00000025823	2	180837557	182600152	1.762595	11.79506743	6.836850458
ENSRNOG00000025832	3	7880953	9640341	1.759388	6.647278357	5.035292825
ENSRNOG00000025843	19	10210023	11167997	0.957974	7.128798075	5.19991208
ENSRNOG00000025848	4	77089615	79105586	2.015971	9.332113374	5.027989295
ENSRNOG00000025898	7	131463659	133103553	1.639894	13.01465405	8.086227494
ENSRNOG00000025899	6	6426083	8151615	1.725532	11.27634184	6.943594058
ENSRNOG00000025936	12	40010858	41199342	1.188484	19.05764917	14.1083751
ENSRNOG00000025994	7	143072338	143348092	0.275754	5.320279317	5.077241821
ENSRNOG00000026050	18	26614435	26669780	0.055345	7.978723023	5.160713525
ENSRNOG00000026051	20	3123326	3677731	0.554405	39.54679886	36.08584627
ENSRNOG00000026109	1	100001871	101204731	1.20286	14.35124848	9.909396113
ENSRNOG00000026163	1	100001871	101204731	1.20286	12.21408815	7.547554796
ENSRNOG00000026169	5	114473167	116379344	1.906177	7.976112056	5.184503584
ENSRNOG00000026171	8	64153310	65125491	0.972181	16.23803065	11.39313684
ENSRNOG00000026176	4	146756923	148738162	1.981239	11.44706816	6.475222015

ENSRNOG00000026186	2	250899587	252063177	1.16359	8.621726011	5.018263583
ENSRNOG00000026204	1	277294538	277530473	0.235935	5.258629348	5.219518016
ENSRNOG00000026211	19	24380885	25994680	1.613795	10.86889732	6.003280841
ENSRNOG00000026226	5	114195607	114597344	0.401737	5.138356634	5.059517585
ENSRNOG00000026238	8	63076527	64137045	1.060518	7.48014405	5.248765304
ENSRNOG00000026271	5	72986226	73909939	0.923713	18.77864779	13.86305183
ENSRNOG00000026323	5	113854377	114119539	0.265162	20.34312816	15.94082104
ENSRNOG00000026344	6	22779898	23645535	0.865637	7.481056471	5.022935751
ENSRNOG00000026387	1	227431634	227678478	0.246844	32.23117836	30.67591057
ENSRNOG00000026425	7	129949665	130465036	0.515371	14.68087243	11.96062739
ENSRNOG00000026458	11	80914991	81847679	0.932688	7.281580852	5.345794969
ENSRNOG00000026490	13	80053053	80638212	0.585159	10.77252072	5.942961562
ENSRNOG00000026493	17	77901116	78754494	0.853378	19.58008615	15.66459347
ENSRNOG00000026542	13	79725738	79902863	0.177125	11.28704742	6.564499162
ENSRNOG00000026577	8	113112286	113426455	0.314169	5.820489457	5.17972056
ENSRNOG00000026646	5	141155774	141388521	0.232747	41.3120697	36.99834477
ENSRNOG00000026649	6	27362384	28340261	0.977877	7.004286222	5.24060196
ENSRNOG00000026650	8	48584778	50414035	1.829257	10.52358653	7.265397945
ENSRNOG00000026653	12	37790412	38862448	1.072036	6.817859167	5.083025851
ENSRNOG00000026702	8	48990583	49596844	0.606261	6.234095437	5.694106879
ENSRNOG00000026742	6	24015829	24794562	0.778733	6.720795721	5.152933274
ENSRNOG00000026762	20	3849395	4288596	0.439201	12.33910722	8.153966124
ENSRNOG00000026833	8	48878239	49596844	0.718605	7.204715516	5.04274129
ENSRNOG00000026857	1	141193568	142417034	1.223466	7.438434225	5.146314207
ENSRNOG00000026861	1	65724555	66345057	0.620502	14.83636575	9.9668232
ENSRNOG00000026874	4	77089615	78613196	1.523581	13.66744905	9.593875267
ENSRNOG00000026919	4	62194526	62935398	0.740872	5.745633782	5.347728989
ENSRNOG00000026937	2	2651095	3800073	1.148978	32.69008843	27.90378073
ENSRNOG00000026952	13	70640932	71640435	0.999503	8.897866034	5.085579193
ENSRNOG00000026953	2	218506446	219251193	0.744747	8.343395346	5.525209956
ENSRNOG00000026978	5	144073066	144242466	0.1694	24.8719551	21.5415926
ENSRNOG00000026989	2	41637131	41745164	0.108033	5.835080402	5.611115555
ENSRNOG00000026994	19	55390962	57293791	1.902829	9.963378433	5.652738374
ENSRNOG00000027012	15	3112530	4496497	1.383967	8.042884375	5.117866594
ENSRNOG00000027017	13	70193862	72083447	1.889585	9.332176363	5.095882242
ENSRNOG00000027161	1	238481458	239660733	1.179275	13.3120166	8.379625226
ENSRNOG00000027212	10	48649150	50348546	1.699396	12.38715184	7.39152381
ENSRNOG00000027228	1	163838326	164564730	0.726404	6.104104539	5.085220068
ENSRNOG00000027230	18	16602084	17184129	0.582045	6.520419315	5.152543549
ENSRNOG00000027259	10	42513555	43630156	1.116601	16.91699989	12.01597996
ENSRNOG00000027276	5	14756186	16217396	1.46121	5.92600106	5.013612194
ENSRNOG00000027278	5	161191222	162235250	1.044028	10.07320235	6.612491156
ENSRNOG00000027319	7	13748731	15191647	1.442916	16.59455423	11.86190218
ENSRNOG00000027343	6	2527714	3666153	1.138439	8.61820038	5.253402507
ENSRNOG00000027410	2	30811435	30973322	0.161887	5.728332545	5.142149501
ENSRNOG00000027468	7	45195992	45568771	0.372779	9.080400114	5.873234155

ENSRNOG00000027480	12	39898098	41306347	1.408249	16.59925775	11.74812189
ENSRNOG00000027513	3	176498481	177336004	0.837523	59.21673122	56.2798104
ENSRNOG00000027516	20	4288570	5428307	1.139737	6.517943651	5.025736906
ENSRNOG00000027564	1	220139843	221694460	1.554617	35.19249726	31.14573533
ENSRNOG00000027582	1	210497508	211080049	0.582541	5.424999726	5.023718785
ENSRNOG00000027617	4	66080821	66164782	0.083961	5.817239436	5.503269593
ENSRNOG00000027630	4	178735754	179730653	0.994899	8.359762582	5.581106209
ENSRNOG00000027645	6	107509151	108589716	1.080565	12.88322847	8.098299194
ENSRNOG00000027730	8	52375755	52761335	0.38558	18.3536039	13.68201289
ENSRNOG00000027784	1	163012978	163307679	0.294701	14.57825118	12.24047152
ENSRNOG00000027797	11	45764620	46441406	0.676786	32.79684431	27.91120075
ENSRNOG00000027867	3	4990909	5976422	0.985513	25.24830435	20.3018201
ENSRNOG00000027880	8	117909623	119771367	1.861744	7.209371665	5.028208045
ENSRNOG00000027914	10	55503411	57114938	1.611527	18.07025401	13.13646743
ENSRNOG00000027919	1	72408885	73847995	1.43911	8.171678955	5.014692241
ENSRNOG00000027955	3	137634520	139349976	1.715456	8.065360057	5.028987596
ENSRNOG00000027976	5	153584463	154142382	0.557919	16.37720148	11.68531345
ENSRNOG00000028015	14	18747776	19743526	0.99575	17.46875643	12.79048121
ENSRNOG00000028041	1	72621890	73318118	0.696228	6.008294757	5.192251486
ENSRNOG00000028090	12	1018920	2224061	1.205141	8.690775532	5.389062298
ENSRNOG00000028092	4	57238350	58840505	1.602155	7.408716451	5.033588932
ENSRNOG00000028156	2	112780982	114142378	1.361396	7.636559646	5.044650674
ENSRNOG00000028207	13	68845276	69956274	1.110998	12.5104281	7.867174188
ENSRNOG00000028292	11	30987052	32214407	1.227355	8.23885063	5.047828699
ENSRNOG00000028319	2	260692585	261768693	1.076108	17.29479278	12.33616211
ENSRNOG00000028328	2	260328356	260547988	0.219632	5.003040314	5.000336574
ENSRNOG00000028430	10	85448613	87133761	1.685148	5.935795465	5.146425891
ENSRNOG00000028436	10	91284751	91661361	0.37661	5.787512927	5.003889873
ENSRNOG00000028440	3	171790513	172819493	1.02898	6.016425254	5.017634881
ENSRNOG00000028505	20	4556045	5752387	1.196342	9.521929543	5.105981359
ENSRNOG00000028523	12	38875359	40794547	1.919188	15.11173448	10.3474946
ENSRNOG00000028545	6	136555069	138151250	1.596181	10.87053653	6.008966272
ENSRNOG00000028576	17	70175511	70598335	0.422824	5.576105561	5.115924103
ENSRNOG00000028580	19	57707759	58840928	1.133169	12.86767487	7.889621231
ENSRNOG00000028598	20	28286713	29240927	0.954214	10.62924237	5.643990507
ENSRNOG00000028624	13	96190375	97185727	0.995352	6.179902054	5.115458042
ENSRNOG00000028638	11	30569584	32568411	1.998827	8.280622188	5.061678305
ENSRNOG00000028730	3	2393968	3669839	1.275871	10.30053313	5.456465567
ENSRNOG00000028774	11	2289373	3979017	1.689644	7.769487246	5.013638133
ENSRNOG00000028803	12	1966183	2419223	0.45304	5.96393667	5.093888859
ENSRNOG00000028814	12	47405312	47469939	0.064627	12.11679322	10.67769846
ENSRNOG00000028946	10	101853255	103038652	1.185397	9.954644341	5.225670696
ENSRNOG00000028965	12	21225283	22102480	0.877197	27.19739333	22.74812125
ENSRNOG00000029001	20	3234049	4139001	0.904952	5.644559048	5.086222202
ENSRNOG00000029071	2	246265482	247369672	1.10419	10.15494098	5.324277841
ENSRNOG00000029079	5	159530026	160787828	1.257802	6.780060465	5.031703473

ENSRNOG00000029087	X	94171351	95946131	1.77478	7.533990296	5.141098131
ENSRNOG00000029089	8	48371799	49640302	1.268503	27.88311631	23.89835462
ENSRNOG00000029127	8	69711497	71348291	1.636794	6.727282955	5.020559625
ENSRNOG00000029128	7	122703557	124353328	1.649771	15.34023798	10.72657477
ENSRNOG00000029134	19	24500819	24773044	0.272225	5.78004326	5.389699972
ENSRNOG00000029179	7	123537762	124623305	1.085543	28.94226922	25.42364142
ENSRNOG00000029292	7	101044755	101227827	0.183072	5.98218565	5.484323109
ENSRNOG00000029308	4	178972678	179730653	0.757975	6.428888131	5.003253622
ENSRNOG00000029336	1	79932195	81153956	1.221761	9.842943094	5.161032486
ENSRNOG00000029340	20	1993822	3854652	1.86083	12.48438814	8.084574017
ENSRNOG00000029370	18	931943	2303460	1.371517	6.704688163	5.244941743
ENSRNOG00000029386	20	3123326	3677731	0.554405	40.84756695	38.46718067
ENSRNOG00000029441	16	26673201	26860020	0.186819	5.485247311	5.291529738
ENSRNOG00000029470	3	161812224	162244520	0.432296	6.796327003	5.472566073
ENSRNOG00000029478	7	14030837	15465730	1.434893	12.81990656	7.863001105
ENSRNOG00000029528	20	10111874	10469962	0.358088	8.851334586	5.055278492
ENSRNOG00000029549	17	30440858	30920238	0.47938	7.716254697	6.113318255
ENSRNOG00000029778	X	5749086	6029696	0.28061	6.318930588	5.327421971
ENSRNOG00000029805	1	83821232	85546865	1.725633	7.298944525	5.053519334
ENSRNOG00000029811	11	32115974	33301074	1.1851	9.279413093	5.773079225
ENSRNOG00000029881	12	2411799	3514403	1.102604	6.862363447	5.159396399
ENSRNOG00000029883	20	1052682	1951407	0.898725	21.64970917	18.53634857
ENSRNOG00000029889	2	250468151	250862722	0.394571	5.372812429	5.287081053
ENSRNOG00000029977	16	23864484	23974308	0.109824	21.8181978	17.73707758
ENSRNOG00000030016	8	39096826	40429873	1.333047	13.39060057	8.568389938
ENSRNOG00000030055	5	167230759	168316646	1.085887	6.170021956	5.231013205
ENSRNOG00000030059	13	91988517	92772349	0.783832	10.97268151	6.397471028
ENSRNOG00000030149	14	28745169	29351569	0.6064	14.57393437	10.07129128
ENSRNOG00000030157	20	3123326	3769641	0.646315	7.287560212	5.23052069
ENSRNOG00000030238	5	147410121	148049877	0.639756	8.00403515	5.139469486
ENSRNOG00000030245	11	86056664	86986472	0.929808	12.6092334	7.637998498
ENSRNOG00000030285	11	197211	1487712	1.290501	7.747961161	5.05249403
ENSRNOG00000030391	8	39096826	40233730	1.136904	6.74052021	5.011791199
ENSRNOG00000030418	X	48086512	49760114	1.673602	14.9413612	10.1454132
ENSRNOG00000030431	20	3680501	5089458	1.408957	14.01297797	9.026891294
ENSRNOG00000030443	X	29495180	29775067	0.279887	14.90019204	13.58023941
ENSRNOG00000030449	8	85599356	86135698	0.536342	15.50910442	10.51011371
ENSRNOG00000030541	10	14399050	14744464	0.345414	5.953807511	5.306920428
ENSRNOG00000030579	12	12586581	13631807	1.045226	12.33089517	7.425948014
ENSRNOG00000030616	1	220245116	222152246	1.90713	12.04108523	7.099650956
ENSRNOG00000030629	6	8358550	9281455	0.922905	6.525273879	5.039714565
ENSRNOG00000030633	7	130173709	130480434	0.306725	17.08250782	12.24893963
ENSRNOG00000030683	20	31908101	31918886	0.010785	5.884450332	5.328655077
ENSRNOG00000030689	1	227266294	228290113	1.023819	15.17038598	10.69346413
ENSRNOG00000030712	20	5430087	5592558	0.162471	38.60975983	36.0391268
ENSRNOG00000030714	8	116549241	117902377	1.353136	9.603899101	5.454074268

ENSRNOG00000030729	20	3674743	5179426	1.504683	8.396020709	5.001579819
ENSRNOG00000030750	10	36297000	37362576	1.065576	8.985934267	5.021049841
ENSRNOG00000030800	8	69711476	69860607	0.149131	6.158765295	5.636689714
ENSRNOG00000030902	4	161569943	163487287	1.917344	9.403207697	5.010798281
ENSRNOG00000030904	2	104287298	105130087	0.842789	7.056166146	5.16188248
ENSRNOG00000031004	5	118559931	120557740	1.997809	8.612705941	5.011293753
ENSRNOG00000031024	2	76699987	77270751	0.570764	16.13439493	11.69101389
ENSRNOG00000031032	8	89708939	89950951	0.242012	6.614714078	5.130904624
ENSRNOG00000031041	4	182960868	183056303	0.095435	5.543624503	5.167901119
ENSRNOG00000031065	20	1795624	2533639	0.738015	32.68665736	27.70837841
ENSRNOG00000031081	7	2582982	3314897	0.731915	7.971363629	5.645132383
ENSRNOG00000031090	20	3971783	5408848	1.437065	11.67519005	6.718656698
ENSRNOG00000031126	8	46546683	47317064	0.770381	7.22430763	5.005292672
ENSRNOG00000031136	2	213525007	213843096	0.318089	26.2934051	23.38696761
ENSRNOG00000031203	6	71268886	73198073	1.929187	9.098252085	5.031576555
ENSRNOG00000031211	1	188252359	190143320	1.890961	6.87775208	5.052497896
ENSRNOG00000031213	10	101534191	102026616	0.492425	7.794317755	5.024471736
ENSRNOG00000031266	8	39096826	40429873	1.333047	9.61568027	5.19084577
ENSRNOG00000031348	9	112900270	113457562	0.557292	17.30205037	14.37160078
ENSRNOG00000031469	8	27085263	28688563	1.6033	15.77322475	11.55876897
ENSRNOG00000031495	17	22841285	23019549	0.178264	7.915105912	6.4738796
ENSRNOG00000031607	20	4614737	5164742	0.550005	32.59141935	29.46894646
ENSRNOG00000031661	6	134606710	136141209	1.534499	8.938793523	5.272159227
ENSRNOG00000031671	4	149846567	150951439	1.104872	17.36352464	12.38472173
ENSRNOG00000031689	20	1216735	3185771	1.969036	9.379314924	5.247687458
ENSRNOG00000031709	4	181375663	182267291	0.891628	5.592241137	5.086588712
ENSRNOG00000031726	12	40475512	41732648	1.257136	9.079869787	5.014539127
ENSRNOG00000031773	19	9535972	10261716	0.725744	10.65197592	6.261567599
ENSRNOG00000031782	8	114538810	115195705	0.656895	14.02232776	9.179607159
ENSRNOG00000031849	15	26297411	27243980	0.946569	13.11926229	9.217670355
ENSRNOG00000031852	11	59279844	59561046	0.281202	43.73379906	40.48566821
ENSRNOG00000031916	7	2582982	3314897	0.731915	8.656824641	5.515761036
ENSRNOG00000031950	7	10903818	12780666	1.876848	8.458554464	5.078441545
ENSRNOG00000031993	7	2582982	3314897	0.731915	8.904411072	5.129756775
ENSRNOG00000032086	9	14330155	14894575	0.56442	6.517897735	5.008712342
ENSRNOG00000032133	15	27331914	28265579	0.933665	14.88866945	9.961108437
ENSRNOG00000032152	10	15437594	15498074	0.06048	5.751368869	5.096075472
ENSRNOG00000032238	8	127446335	128729750	1.283415	9.201209921	5.173825115
ENSRNOG00000032350	14	65620573	67140281	1.519708	10.67181649	5.710393268
ENSRNOG00000032352	13	92078003	92324935	0.246932	5.713920257	5.001431752
ENSRNOG00000032364	8	46430688	47139788	0.7091	7.497501413	5.057655872
ENSRNOG00000032375	6	24240015	25045481	0.805466	14.97958495	12.58120287
ENSRNOG00000032381	10	88758926	89540093	0.781167	10.0544113	5.219516114
ENSRNOG00000032436	8	82477217	83010136	0.532919	5.163955586	5.052647711
ENSRNOG00000032461	8	27176010	28549351	1.373341	40.35032609	35.35453878
ENSRNOG00000032471	14	115041664	115438145	0.396481	7.443779011	5.702896156

ENSRNOG00000032508	6	107403899	108475440	1.071541	25.86815085	22.02256377
ENSRNOG00000032513	6	54094851	55365440	1.270589	12.34416361	7.387456386
ENSRNOG00000032596	20	3797872	3892983	0.095111	29.32910663	25.69851304
ENSRNOG00000032625	1	80914347	81502393	0.588046	10.15767537	5.313496225
ENSRNOG00000032664	20	3851160	4139001	0.287841	14.01854798	9.383123464
ENSRNOG00000032708	20	3797950	4582624	0.784674	11.44715836	6.511435865
ENSRNOG00000032813	20	3234049	3680501	0.446452	42.4789369	41.45473002
ENSRNOG00000032846	7	126509787	127091529	0.581742	14.68382023	9.749752369
ENSRNOG00000032942	20	3677731	5592558	1.914827	7.989205612	5.034646418
ENSRNOG00000032959	2	243022668	244510525	1.487857	17.93727328	13.8844625
ENSRNOG00000032994	5	153584463	154462997	0.878534	19.9979699	16.49779377
ENSRNOG00000033017	12	20808224	22102480	1.294256	14.717373	10.6886291
ENSRNOG00000033076	17	87114314	89098692	1.984378	9.604064765	5.153753689
ENSRNOG00000033087	20	28915161	30459798	1.544637	23.45823512	18.50981315
ENSRNOG00000033090	6	20770760	21553668	0.782908	7.312903803	5.058087361
ENSRNOG00000033202	4	116739879	117932617	1.192738	5.047841012	5.015779162
ENSRNOG00000033215	20	4100234	4343998	0.243764	5.314116001	5.131730093
ENSRNOG00000033220	12	40690536	41649896	0.95936	7.431193051	5.111098562
ENSRNOG00000033261	15	17425865	18490638	1.064773	6.257013914	5.071247858
ENSRNOG00000033266	10	12375785	12992074	0.616289	5.628026526	5.18287682
ENSRNOG00000033348	3	113282550	115286265	2.003715	10.78382732	5.864252701
ENSRNOG00000033570	7	124847447	126104934	1.257487	8.814559605	5.286216783
ENSRNOG00000033572	7	97817306	99089086	1.27178	6.837935364	5.043680272
ENSRNOG00000033693	2	29967578	31388486	1.420908	9.198586506	5.052577165
ENSRNOG00000033791	7	11277516	13270323	1.992807	8.576928233	5.002314696
ENSRNOG00000033809	8	118655787	119742105	1.086318	33.25998316	28.56902933
ENSRNOG00000033837	2	66016004	67443891	1.427887	12.24426648	7.259717568
ENSRNOG00000033855	4	178455542	179563385	1.107843	8.61975919	5.019789329
ENSRNOG00000033862	5	58334949	59878668	1.543719	8.1539544	5.226911259
ENSRNOG00000033984	5	153584463	154142382	0.557919	22.62940978	19.06445962
ENSRNOG00000034106	1	77883586	77963950	0.080364	5.315232461	5.106465947
ENSRNOG00000034110	10	86905390	88129353	1.223963	10.66084708	5.761207142
ENSRNOG00000034126	18	30262038	31122339	0.860301	7.215304359	5.056549779
ENSRNOG00000034139	7	60201361	60606516	0.405155	26.75524749	23.30744782
ENSRNOG00000034200	14	41407090	42110086	0.702996	7.397106927	5.090934718
ENSRNOG00000034228	4	173714074	174240055	0.525981	22.59688043	18.34539994
ENSRNOG00000034229	17	31552005	33280374	1.728369	6.348864237	5.02738354
ENSRNOG00000035653	20	3798422	3892577	0.094155	7.274798645	5.547227122
ENSRNOG00000036603	1	252658758	253276207	0.617449	6.150793882	5.408115811
ENSRNOG00000036622	1	228170743	229897057	1.726314	7.381403122	5.017718627
ENSRNOG00000036658	10	110756338	111106404	0.350066	5.757632434	5.379378489
ENSRNOG00000036667	10	110233321	110346200	0.112879	5.897681874	5.009647
ENSRNOG00000036668	10	109425723	110853210	1.427487	6.483273872	5.083984045
ENSRNOG00000036673	10	109263127	110327931	1.064804	9.105099581	5.694740051
ENSRNOG00000036674	10	110192671	110346200	0.153529	40.67893843	35.7342623
ENSRNOG00000036687	10	108794264	110756338	1.962074	9.104156239	5.023651481

ENSRNOG00000036703	1	198741696	200274279	1.532583	8.390693638	5.054031758
ENSRNOG00000036726	10	103074442	103467219	0.392777	17.20436861	13.15188657
ENSRNOG00000036728	10	102928096	104433643	1.505547	12.42037397	7.524047223
ENSRNOG00000036758	1	187965070	189268690	1.30362	6.683204819	5.002648927
ENSRNOG00000036866	1	163012978	164179229	1.166251	14.97361126	10.04462809
ENSRNOG00000036877	2	250544929	251080082	0.535153	7.263641612	5.00435971
ENSRNOG00000036882	10	85618775	86013314	0.394539	5.784509476	5.369886432
ENSRNOG00000036917	4	182840075	183969779	1.129704	10.66681489	6.231949184
ENSRNOG00000036918	4	182707262	184140434	1.433172	6.903023599	5.335946345
ENSRNOG00000036964	3	139540551	140933592	1.393041	8.965262153	5.047998341
ENSRNOG00000036980	2	231573807	231939209	0.365402	11.47136863	8.588540571
ENSRNOG00000037076	4	161569943	163127756	1.557813	9.397353456	5.303466073
ENSRNOG00000037080	1	126977591	129033670	2.056079	6.847092287	5.21130424
ENSRNOG00000037160	3	114241518	115292511	1.050993	17.89629285	13.4213665
ENSRNOG00000037167	8	118268928	119870529	1.601601	11.89295592	7.361670686
ENSRNOG00000037206	4	152788780	152928835	0.140055	34.44054297	31.62757142
ENSRNOG00000037225	9	121017552	122009238	0.991686	12.85356936	8.041861365
ENSRNOG00000037339	1	97529664	99510950	1.981286	10.66777427	5.670827866
ENSRNOG00000037348	1	98072786	99634775	1.561989	12.32526916	7.340727263
ENSRNOG00000037428	12	51865511	52388051	0.52254	7.893322916	5.192575637
ENSRNOG00000037432	5	140360176	140672421	0.312245	5.918805633	5.130515573
ENSRNOG00000037563	10	56660414	56739175	0.078761	5.318754901	5.061031998
ENSRNOG00000037567	3	91008021	91353742	0.345721	11.40470375	7.067070126
ENSRNOG00000037595	5	135014399	135313694	0.299295	20.60089974	16.41962906
ENSRNOG00000037687	7	82502290	82765713	0.263423	5.638453631	5.085542176
ENSRNOG00000037688	20	45061799	46408439	1.34664	19.4073947	14.72508034
ENSRNOG00000037715	1	83246368	84988059	1.741691	10.57980807	5.715552263
ENSRNOG00000037765	20	27780704	28113373	0.332669	5.540301586	5.508097844
ENSRNOG00000037799	X	82512438	84011746	1.499308	11.30688268	6.643216265
ENSRNOG00000037815	12	39461392	41454800	1.993408	12.09768828	7.225204824
ENSRNOG00000037851	11	88793531	90137636	1.344105	15.86545982	10.88023302
ENSRNOG00000037928	13	98349715	99842439	1.492724	13.86902071	9.055465586
ENSRNOG00000037957	11	87411979	88333943	0.921964	11.00997721	6.223557984
ENSRNOG00000037998	6	111451722	111845365	0.393643	5.531037789	5.130471985
ENSRNOG00000038004	3	68626749	70545627	1.918878	9.630673978	5.079462386
ENSRNOG00000038102	4	99449216	101268248	1.819032	7.901187271	5.486555005
ENSRNOG00000038218	2	140454944	140592796	0.137852	5.996448681	5.129382263
ENSRNOG00000038432	13	88433133	89223814	0.790681	17.32843416	12.50835136
ENSRNOG00000038449	4	88808693	90505773	1.69708	6.9160587	5.03925415
ENSRNOG00000038480	6	99134642	99995408	0.860766	18.06893053	13.39787693
ENSRNOG00000038483	15	50816183	52036682	1.220499	9.36014778	5.81160834
ENSRNOG00000038512	11	76322713	76811761	0.489048	45.99324844	43.40346727
ENSRNOG00000038574	7	44195777	45038772	0.842995	10.68952649	6.169833308
ENSRNOG00000038720	6	92117453	92977854	0.860401	5.572864707	5.086692
ENSRNOG00000038883	20	7284029	8075954	0.791925	26.3147585	24.16264163
ENSRNOG00000038894	10	31722017	32241608	0.519591	32.79073834	27.95926966

ENSRNOG00000038916	7	28561897	28953176	0.391279	7.030587711	5.066014919
ENSRNOG00000038999	20	5437267	5690325	0.253058	28.21621245	24.63002351
ENSRNOG00000039024	11	60794120	61872236	1.078116	13.17428014	8.198978433
ENSRNOG00000039284	15	33034074	33992205	0.958131	14.48215623	10.02439974
ENSRNOG00000039315	3	11105191	12381436	1.276245	9.940372122	5.031481672
ENSRNOG00000039379	17	21385302	22585578	1.200276	13.69193487	8.840916903
ENSRNOG00000039454	18	29904778	31859738	1.95496	10.74008269	5.744986558
ENSRNOG00000039455	18	30262038	31859738	1.5977	13.32305778	8.477393048
ENSRNOG00000039472	18	29986676	31236727	1.250051	8.091307222	5.174672198
ENSRNOG00000039481	2	51987220	53481044	1.493824	10.00109887	5.098722893
ENSRNOG00000039494	4	50222490	50720035	0.497545	19.36277784	15.81704511
ENSRNOG00000039504	14	18781132	20027802	1.24667	16.17494285	11.22924138
ENSRNOG00000039528	16	18686056	20215376	1.52932	10.3505231	5.416651601
ENSRNOG00000039656	10	13399207	14094001	0.694794	41.97877332	37.7283622
ENSRNOG00000039717	2	37769656	38023248	0.253592	5.154860416	5.070572553
ENSRNOG00000039744	20	3680501	5593673	1.913172	16.63566217	11.71963751
ENSRNOG00000039786	16	7338578	9246845	1.908267	7.982860196	5.185599988
ENSRNOG00000039790	9	17559736	18688614	1.128878	12.73318189	8.241740076
ENSRNOG00000039850	11	34034132	35290485	1.256353	13.1030437	10.52993805
ENSRNOG00000039858	7	10656259	12118230	1.461971	14.04048897	9.295526568
ENSRNOG00000039861	7	10519836	12085496	1.56566	9.62914208	5.032898568
ENSRNOG00000039871	15	12766761	13801439	1.034678	25.27269227	20.70316044
ENSRNOG00000039890	14	5060280	6999285	1.939005	13.71618664	9.246090812
ENSRNOG00000039980	X	122923252	123631736	0.708484	14.79615442	10.76296539
ENSRNOG00000040040	5	24081479	24689503	0.608024	10.22231844	5.368976637
ENSRNOG00000040052	20	1533310	2533639	1.000329	26.17361421	22.23233087
ENSRNOG00000040108	4	13344878	15208938	1.86406	8.905435243	5.121257425
ENSRNOG00000040109	9	14596401	15373115	0.776714	5.913143341	5.081526205
ENSRNOG00000040121	10	1327035	2690784	1.363749	62.04047545	57.44204757
ENSRNOG00000040242	1	4521570	6311615	1.790045	7.737877596	5.082061093
ENSRNOG00000040297	2	1967070	3998843	2.031773	14.54536	10.11369778
ENSRNOG00000040301	4	5811751	7362081	1.55033	8.034469961	5.119643713
ENSRNOG00000040350	1	214856467	216640696	1.784229	8.679826606	5.512701008
ENSRNOG00000040715	10	85569673	87107593	1.53792	5.420080077	5.01835799
ENSRNOG00000041411	3	112479154	114390301	1.911147	6.671358732	5.17452651
ENSRNOG00000041441	6	51675340	52180231	0.504891	5.513805053	5.032786264
ENSRNOG00000042084	1	188729393	190236961	1.507568	7.935133184	5.835459106
ENSRNOG00000042163	5	135582619	136819896	1.237277	11.03035017	6.144436137
ENSRNOG00000042201	13	95658320	97193465	1.535145	6.620296516	5.022496844
ENSRNOG00000042230	9	14475396	14650786	0.17539	5.608341643	5.057984709
ENSRNOG00000042232	1	188509374	190236961	1.727587	6.530140456	5.200584602
ENSRNOG00000042253	15	3407519	4496497	1.088978	38.79815222	34.0837866
ENSRNOG00000042258	10	12233085	12774333	0.541248	5.227116438	5.124440446
ENSRNOG00000042264	18	30262038	31122339	0.860301	6.61814694	5.006602025
ENSRNOG00000042277	14	104950802	106055704	1.104902	6.994076009	5.132171389
ENSRNOG00000042283	2	121899139	123483781	1.584642	16.21411073	11.50850406

ENSRNOG00000042286	13	108740704	110421261	1.680557	7.953996941	5.009646527
ENSRNOG00000042292	1	172365369	174093771	1.728402	7.965328556	5.296086976
ENSRNOG00000042340	14	6507938	7471165	0.963227	5.976465786	5.012200518
ENSRNOG00000042389	2	251914510	252242125	0.327615	6.61676656	5.090690188
ENSRNOG00000042445	10	103447216	104721301	1.274085	19.85612184	14.87447849
ENSRNOG00000042451	13	52881716	53290650	0.408934	17.30955903	15.37821048
ENSRNOG00000042468	9	14595148	15818029	1.222881	13.58605307	8.946006858
ENSRNOG00000042478	4	22067952	23232692	1.16474	24.53997907	21.37754685
ENSRNOG00000042482	4	145163922	145586385	0.422463	5.508256837	5.06599438
ENSRNOG00000042499	4	99897739	101392035	1.494296	10.98941214	6.160533438
ENSRNOG00000042576	3	93664565	95629129	1.964564	8.774013645	5.350687962
ENSRNOG00000042596	5	58315029	59051436	0.736407	5.730007224	5.263131947
ENSRNOG00000042605	1	58829340	60585646	1.756306	11.13098433	6.210586738
ENSRNOG00000042607	12	38567842	39797540	1.229698	7.424031518	5.014006976
ENSRNOG00000042620	1	260522692	261467225	0.944533	5.81875063	5.07010868
ENSRNOG00000042623	16	17470411	17963731	0.49332	13.75534017	8.803698493
ENSRNOG00000042634	6	127612590	128129224	0.516634	22.27985962	18.37428139
ENSRNOG00000042658	16	19364684	19916106	0.551422	6.984551412	5.327193705
ENSRNOG00000042726	8	95978197	96556678	0.578481	23.57912067	18.60129466
ENSRNOG00000042758	4	21791493	22863696	1.072203	11.09637738	7.155878368
ENSRNOG00000042787	5	147461252	148052425	0.591173	6.434616663	5.071274789
ENSRNOG00000042825	10	103074442	103586520	0.512078	7.333244458	5.943159247
ENSRNOG00000042851	7	14323483	15868667	1.545184	7.303965432	5.097301086
ENSRNOG00000042852	1	2015941	2370907	0.354966	10.81742618	5.854288895
ENSRNOG00000042879	18	63425096	64036507	0.611411	12.29802021	7.411324468
ENSRNOG00000042888	19	48612833	49321083	0.70825	7.861560384	5.059465217
ENSRNOG00000042905	20	3123326	3892983	0.769657	12.51344904	7.728753659
ENSRNOG00000042912	10	81977999	82742463	0.764464	48.18662744	43.45848579
ENSRNOG00000042961	9	53274961	53405603	0.130642	5.27816687	5.143065327
ENSRNOG00000043069	11	68722416	68770980	0.048564	5.167791196	5.117694198
ENSRNOG00000043094	2	52903949	54300632	1.396683	10.3500993	5.401184507
ENSRNOG00000043176	4	13432908	14869234	1.436326	7.50171015	5.016125887
ENSRNOG00000043192	17	81184593	81460026	0.275433	6.54625648	5.155237183
ENSRNOG00000043204	3	80028136	81569119	1.540983	9.89031192	8.193847234
ENSRNOG00000043233	7	14449743	15909399	1.459656	11.99678218	7.662643942
ENSRNOG00000043267	12	16316835	16959208	0.642373	5.698925318	5.036546736
ENSRNOG00000043292	2	42844304	42993724	0.14942	5.941709436	5.941709436
ENSRNOG00000043295	10	94950933	96209078	1.258145	14.70119052	10.27718384
ENSRNOG00000043345	11	71431989	72721593	1.289604	8.70497381	5.197678252
ENSRNOG00000043374	13	55186549	56852712	1.666163	12.03073434	7.672451849
ENSRNOG00000043390	7	92644711	94493874	1.849163	6.083338536	5.057383576
ENSRNOG00000043410	8	5481208	6841847	1.360639	18.06860121	13.07096297
ENSRNOG00000043436	20	29345852	29792124	0.446272	5.427971309	5.01007508
ENSRNOG00000043451	14	6701709	7241160	0.539451	6.185051743	5.154852918
ENSRNOG00000044214	18	16602084	17288470	0.686386	10.32517276	5.463614561
ENSRNOG00000045560	1	172329355	173382214	1.052859	16.41533894	11.48586877

ENSRNOG00000045626	19	49392177	50362224	0.970047	33.10267244	29.68376689
ENSRNOG00000045764	2	239354321	239861167	0.506846	6.094016999	5.082060276
ENSRNOG00000045771	4	69587578	70538070	0.950492	10.2548762	5.290656906
ENSRNOG00000045791	10	108411994	109319018	0.907024	7.528513093	5.452327922
ENSRNOG00000045840	4	169874745	170919797	1.045052	24.45163302	19.89431039
ENSRNOG00000045888	10	103987789	104998444	1.010655	12.32437126	8.770035745
ENSRNOG00000045924	20	3234049	3680501	0.446452	21.77398645	20.5503487
ENSRNOG00000045926	10	109169897	109877518	0.707621	18.43855923	13.65729445
ENSRNOG00000045960	18	29031074	30569486	1.538412	13.50113469	8.96411628
ENSRNOG00000045989	10	15136730	15701793	0.565063	24.05538945	19.8338713
ENSRNOG00000046121	10	104623198	104998444	0.375246	10.85842992	6.428438119
ENSRNOG00000046128	9	9184142	9641881	0.457739	6.003001118	5.156524923
ENSRNOG00000046168	2	165473046	166015250	0.542204	5.376889541	5.016289488
ENSRNOG00000046181	1	188974685	190869466	1.894781	9.104984691	5.174080499
ENSRNOG00000046204	20	31453784	32738554	1.28477	28.59391978	23.84346866
ENSRNOG00000046216	10	104750744	104998444	0.2477	11.25991979	11.19796202
ENSRNOG00000046294	20	3807984	5181359	1.373375	15.94315583	12.27092484
ENSRNOG00000046309	6	124483658	125581433	1.097775	5.736363822	5.283576269
ENSRNOG00000046330	10	34676272	34762885	0.086613	5.934638902	5.613925597
ENSRNOG00000046338	1	83549754	85459036	1.909282	12.45294098	7.658947687
ENSRNOG00000046426	9	19167625	20409673	1.242048	9.80833749	5.470871296
ENSRNOG00000046452	13	88433133	89633150	1.200017	7.455020653	5.105930569
ENSRNOG00000046460	13	108723907	110420885	1.696978	26.06630214	22.37655327
ENSRNOG00000046468	2	256747755	257216301	0.468546	16.3056153	11.60315541
ENSRNOG00000046493	10	83904890	85281862	1.376972	14.30145027	9.899294074
ENSRNOG00000046535	8	114422584	115195705	0.773121	8.920392639	5.083911037
ENSRNOG00000046621	19	39242800	39303710	0.06091	5.940002769	5.247398926
ENSRNOG00000046696	12	21220318	22358555	1.138237	7.78722713	5.244169532
ENSRNOG00000046745	3	111515260	113380888	1.865628	12.34906058	7.792721503
ENSRNOG00000046890	10	98285982	99536628	1.250646	9.345985721	5.195849776
ENSRNOG00000046946	10	110922727	111084491	0.161764	26.5690412	23.36002045
ENSRNOG00000046980	10	10463276	11324727	0.861451	11.51645317	6.696124671
ENSRNOG00000046983	1	7592842	7743648	0.150806	30.5842996	28.79951537
ENSRNOG00000047019	1	274159252	274755427	0.596175	5.590111961	5.138591255
ENSRNOG00000047028	3	151443180	151522448	0.079268	32.31593272	27.99008858
ENSRNOG00000047053	8	27176010	28688563	1.512553	7.869858927	5.106260903
ENSRNOG00000047171	20	7290651	9299270	2.008619	16.61481034	11.73605465
ENSRNOG00000047185	5	147194566	148497484	1.302918	12.30356962	7.500743102
ENSRNOG00000047300	6	129101153	129432663	0.33151	11.95497789	6.991056848
ENSRNOG00000047319	4	182615204	184220441	1.605237	6.675838576	5.073373277
ENSRNOG00000047349	1	226886256	228620353	1.734097	10.24284353	5.26144251
ENSRNOG00000047413	15	57470220	58571425	1.101205	8.389450064	5.026017168
ENSRNOG00000047531	10	109074601	110327931	1.25333	10.47409432	8.017676126
ENSRNOG00000047537	5	28100718	28846428	0.74571	22.39882953	18.00539722
ENSRNOG00000047574	6	112020477	112052267	0.03179	5.106519944	5.106519944
ENSRNOG00000047656	10	108411994	109319018	0.907024	17.41186156	12.97676646

ENSRNOG00000047669	19	36486378	37838079	1.351701	5.779086129	5.094159736
ENSRNOG00000047708	6	110556223	111439063	0.88284	8.441736244	5.25912926
ENSRNOG00000047783	1	20360680	20705665	0.344985	22.8976289	18.24813479
ENSRNOG00000047796	17	8689064	9957390	1.268326	9.123299591	5.081314557
ENSRNOG00000047799	8	81466275	83193324	1.727049	9.100136629	5.085048821
ENSRNOG00000047898	2	198037733	198683058	0.645325	26.04227676	21.67425481
ENSRNOG00000047939	8	49977877	50034337	0.05646	5.470208996	5.012231899
ENSRNOG00000047966	20	4557631	5751889	1.194258	12.22076202	7.258475588
ENSRNOG00000048004	6	27012113	28520502	1.508389	5.543861942	5.020589195
ENSRNOG00000048043	2	25205732	26871291	1.665559	16.41320176	12.15002942
ENSRNOG00000048048	20	827778	1951407	1.123629	15.84534633	11.18509599
ENSRNOG00000048121	10	1110007	3000575	1.890568	12.12157066	7.197098518
ENSRNOG00000048256	2	184519047	185199418	0.680371	10.21127528	5.951037769
ENSRNOG00000048258	2	239632875	240670352	1.037477	5.98435262	5.211686059
ENSRNOG00000048363	2	80231561	81754321	1.52276	6.635619017	6.013041562
ENSRNOG00000048450	7	14474028	15491246	1.017218	24.33845251	19.94089336
ENSRNOG00000048553	5	147410121	148049877	0.639756	27.52561807	23.32955724
ENSRNOG00000048567	9	99990405	100074626	0.084221	13.75507368	8.864507249
ENSRNOG00000048712	10	108805799	110195602	1.389803	24.08533772	19.09945682
ENSRNOG00000048718	8	116714484	117597975	0.883491	19.10969283	15.34771318
ENSRNOG00000048723	7	1206510	1339100	0.13259	11.32670875	9.101380019
ENSRNOG00000048838	10	90631477	91258366	0.626889	5.623770729	5.033473602
ENSRNOG00000048848	1	77430891	79219093	1.788202	12.54003089	8.399948509
ENSRNOG00000048951	20	2434997	3675590	1.240593	21.88169356	17.12816737
ENSRNOG00000048979	7	14433818	15624768	1.19095	9.890050588	5.043235908
ENSRNOG00000049028	1	77963950	78201484	0.237534	5.378003836	5.02352124
ENSRNOG00000049034	3	11469420	12381436	0.912016	16.59405097	12.65066207
ENSRNOG00000049054	6	40946145	41977432	1.031287	9.729211412	5.372039647
ENSRNOG00000049056	3	11864846	12381436	0.51659	43.67524533	42.58010933
ENSRNOG00000049140	4	88808693	90140516	1.331823	34.86276221	29.88285619
ENSRNOG00000049177	16	22410966	23602906	1.19194	7.274325931	5.020091392
ENSRNOG00000049370	19	32718768	33384949	0.666181	19.19720411	14.53126211
ENSRNOG00000049380	11	33341479	34248330	0.906851	28.74163038	24.00032112
ENSRNOG00000049410	17	63218622	64990016	1.771394	10.85638593	5.933233674
ENSRNOG00000049437	9	99825065	100989261	1.164196	10.14724194	5.641681326
ENSRNOG00000049481	14	20742287	21875826	1.133539	13.96258191	9.562873666
ENSRNOG00000049498	16	23864484	24106707	0.242223	19.10606116	15.80005287
ENSRNOG00000049552	10	107535445	109431285	1.89584	7.043892294	5.101105123
ENSRNOG00000049590	20	649245	2226529	1.577284	9.001504897	5.379755036
ENSRNOG00000049605	1	79596130	80332990	0.73686	21.23594011	17.11509284
ENSRNOG00000049661	1	78639850	79192416	0.552566	5.605734932	5.009558401
ENSRNOG00000049714	5	154575545	155023257	0.447712	8.353105323	5.230294909
ENSRNOG00000049771	20	13788834	14443816	0.654982	25.55203499	20.55432161
ENSRNOG00000049780	4	22287491	23156044	0.868553	5.557444347	5.304661559
ENSRNOG00000049911	11	33386651	34453291	1.06664	29.09816633	24.90188801
ENSRNOG00000049949	16	20770620	21707286	0.936666	8.037604398	5.005922493

ENSRNOG00000050057	10	12944252	14744464	1.800212	9.926393233	5.318751407
ENSRNOG00000050087	19	49376686	50362224	0.985538	6.618219373	5.251122454
ENSRNOG00000050091	11	89528513	89958765	0.430252	5.263807634	5.144109683
ENSRNOG00000050128	12	20808224	21205086	0.396862	6.18664606	5.161533376
ENSRNOG00000050129	1	1663286	2370907	0.707621	12.50067011	7.611154544
ENSRNOG00000050169	12	1179746	2867441	1.687695	9.967065412	5.202911307
ENSRNOG00000050210	20	231906	612395	0.380489	9.44341198	5.047336985
ENSRNOG00000050215	20	3067042	4405699	1.338657	5.911769635	5.006417432
ENSRNOG00000050231	4	97566477	98355869	0.789392	7.92671835	5.269632775
ENSRNOG00000050233	20	3123326	4615133	1.491807	18.64496754	14.3981846
ENSRNOG00000050298	10	108981762	110346200	1.364438	27.0160044	22.66437917
ENSRNOG00000050347	10	88958066	90288686	1.33062	8.04968088	5.012322486
ENSRNOG00000050378	18	29031074	30898679	1.867605	10.3819806	5.73899614
ENSRNOG00000050419	7	69381141	71089920	1.708779	12.06896866	7.15600286
ENSRNOG00000050425	20	44066108	45992156	1.926048	9.425938563	5.132243841
ENSRNOG00000050534	1	235598235	236553920	0.955685	5.157696623	5.094901617
ENSRNOG00000050570	6	25571702	27362384	1.790682	26.0509603	21.62237896
ENSRNOG00000050585	1	260303471	262161028	1.857557	8.879657561	5.136081093
ENSRNOG00000050624	1	127214583	128583557	1.368974	12.96221779	8.150711994
ENSRNOG00000050636	5	158092163	159508434	1.416271	13.63887047	8.897468327
ENSRNOG00000050649	10	48384375	49454673	1.070298	6.214170494	5.041112659
ENSRNOG00000050729	3	145124784	146576073	1.451289	35.07382322	30.83515449
ENSRNOG00000050767	17	27639371	28933049	1.293678	10.30406571	5.47799028
ENSRNOG00000050817	6	110155828	110185381	0.029553	21.84628884	18.32343045
ENSRNOG00000050831	1	65614152	67131024	1.516872	9.634371325	5.438141725
ENSRNOG00000050955	10	1327035	1813286	0.486251	58.27126028	57.91677974
ENSRNOG00000051056	6	25486805	27362384	1.875579	11.42841825	7.682743221
ENSRNOG00000051079	10	69662119	70591035	0.928916	12.45097053	7.861247609
ENSRNOG00000051100	13	77355954	77386684	0.03073	5.130602803	5.130602803
ENSRNOG00000051135	14	83418973	84103330	0.684357	5.61040969	5.079666888
ENSRNOG00000051166	13	74803234	75201763	0.398529	20.89744262	16.32422827
ENSRNOG00000051216	X	64698494	66279910	1.581416	12.79642276	7.811091687
ENSRNOG00000051221	8	64137045	65984257	1.847212	7.07196104	5.096073542
ENSRNOG00000051262	1	237992467	238445460	0.452993	19.52460392	14.82198438
ENSRNOG00000051284	1	90280970	90747472	0.466502	5.619001999	5.23886396
ENSRNOG00000051285	8	64137045	66267197	2.130152	8.835235474	5.116318569
ENSRNOG00000051306	1	260303471	261352060	1.048589	5.940650402	5.094400082
ENSRNOG00000051399	20	40618125	41353909	0.735784	8.003680065	5.015860415
ENSRNOG00000051470	3	3297598	4316544	1.018946	15.79850547	11.01004081
ENSRNOG00000051536	7	24935628	25154253	0.218625	5.963020663	5.269977993
ENSRNOG00000051563	7	12223863	13732846	1.508983	8.501477947	5.048363926
ENSRNOG00000051571	14	8781796	9339988	0.558192	6.740374731	5.007491924
ENSRNOG00000051578	1	60439604	61724183	1.284579	13.79026775	8.836805543
ENSRNOG00000051636	5	133293568	134070712	0.777144	10.70686502	6.387080226
ENSRNOG00000051643	5	28893058	30494087	1.601029	7.5037392	5.037240744
ENSRNOG00000051682	2	20263374	21473198	1.209824	21.68844589	16.80263429

ENSRNOG00000051688	16	10412218	11332698	0.92048	6.69209374	5.019500035
ENSRNOG00000051699	12	13003496	13688756	0.68526	19.66666262	15.86838794
ENSRNOG00000051819	19	49318266	50193012	0.874746	7.25990606	5.200766955
ENSRNOG00000051915	1	87317431	87784423	0.466992	5.874986062	5.076606471
ENSRNOG00000051938	1	52902439	54366463	1.464024	8.289846734	5.060400715
ENSRNOG00000051952	4	43326121	45288087	1.961966	8.437681414	5.189711013
ENSRNOG00000051977	16	10412218	11332698	0.92048	16.88119928	12.19024179
ENSRNOG00000051990	4	149846567	151470811	1.624244	9.236107351	5.021099105
ENSRNOG00000052003	4	146663407	146884050	0.220643	6.241982434	5.062276115
ENSRNOG00000052064	7	125124877	126228227	1.10335	6.78241513	5.796715218
ENSRNOG00000052080	14	85398405	87284706	1.886301	8.905382798	5.095277144
ENSRNOG00000052121	12	16162985	16228575	0.06559	5.809090203	5.61297795
ENSRNOG00000052122	20	3123326	3680501	0.557175	6.609073444	5.045136407
ENSRNOG00000052128	4	162387375	163345192	0.957817	5.319295328	5.020423791
ENSRNOG00000052129	16	17963731	19916106	1.952375	10.18567572	5.185998347
ENSRNOG00000052130	X	136876812	138651073	1.774261	32.99010761	28.44419947
ENSRNOG00000052157	7	52052627	52608428	0.555801	11.45551255	7.478428163
ENSRNOG00000052167	2	30559382	31555775	0.996393	14.14118491	9.579335361
ENSRNOG00000052189	1	12892014	13710868	0.818854	5.45279354	5.016679685
ENSRNOG00000052247	2	240678920	241006442	0.327522	12.96296017	8.153189645
ENSRNOG00000052276	3	136480597	137081993	0.601396	6.726592189	5.020402955
ENSRNOG00000052310	19	41121780	42417684	1.295904	9.516328967	5.059754459
ENSRNOG00000052354	15	27839386	28812301	0.972915	21.15743249	16.46556985
ENSRNOG00000052365	20	2280293	3087561	0.807268	6.638826272	5.351340952
ENSRNOG00000052405	3	174580354	175247086	0.666732	8.158531193	5.041578772
ENSRNOG00000052406	1	61273624	61332543	0.058919	6.160704695	5.671221948
ENSRNOG00000052415	20	13780667	14497534	0.716867	6.050132854	5.176036037
ENSRNOG00000052424	12	48840256	50542406	1.70215	13.16479586	8.181223433
ENSRNOG00000052445	4	66797111	67777995	0.980884	5.976097038	5.01379811
ENSRNOG00000052467	4	162479934	163572978	1.093044	10.21997106	5.548151315
ENSRNOG00000052469	16	10265971	11641413	1.375442	15.58374108	10.63210149
ENSRNOG00000052498	3	50054687	51205592	1.150905	8.717235724	6.050880087
ENSRNOG00000052524	7	57534516	57987134	0.452618	25.36191851	20.63758717
ENSRNOG00000052563	4	157068267	157240578	0.172311	6.387295644	5.689145292
ENSRNOG00000052635	X	13198426	14806211	1.607785	13.7399409	9.12082209
ENSRNOG00000052653	2	224678312	225204164	0.525852	5.823818809	5.093054573
ENSRNOG00000052732	6	2620440	4300381	1.679941	9.291522366	5.024356739
ENSRNOG00000052757	5	133293568	134070712	0.777144	16.18523953	11.18825893
ENSRNOG00000052787	8	79037544	79778396	0.740852	6.483275348	5.179973098
ENSRNOG00000052811	5	168464554	169052440	0.587886	6.121408033	5.296428462
ENSRNOG00000052839	20	827778	1951407	1.123629	13.37589324	9.096417408
ENSRNOG00000052840	10	93951338	94544626	0.593288	5.461357011	5.083723474
ENSRNOG00000052844	9	119291812	120081490	0.789678	6.131779567	5.921353148
ENSRNOG00000052918	12	21928875	22820298	0.891423	7.494385132	5.01462383
ENSRNOG00000053015	1	198434590	199780361	1.345771	7.413478987	5.048206905
ENSRNOG00000053034	8	104370226	104623901	0.253675	15.675891	11.1805434

ENSRNOG00000053045	12	48840256	48916528	0.076272	5.125909977	5.006351219
ENSRNOG00000053052	1	44896705	46686823	1.790118	13.10664041	8.453762024
ENSRNOG00000053055	10	103688556	104721301	1.032745	12.46529076	7.798954603
ENSRNOG00000053079	10	764044	1910787	1.146743	12.99263635	8.555394629
ENSRNOG00000053084	1	99921627	101204731	1.283104	7.381417541	5.285486943
ENSRNOG00000053136	16	82694505	83866259	1.171754	9.738222301	5.039174034
ENSRNOG00000053159	13	109960884	110909552	0.948668	6.439203025	5.221650261
ENSRNOG00000053196	7	138534537	140119936	1.585399	7.963696683	5.05207989
ENSRNOG00000053269	7	138889117	140320290	1.431173	43.93542873	39.25735376
ENSRNOG00000053272	13	50054361	51995510	1.941149	6.656583404	5.079795969
ENSRNOG00000053288	20	20055286	20291456	0.23617	9.266143166	5.010930867
ENSRNOG00000053290	3	120916199	122126806	1.210607	16.32899113	12.45490007
ENSRNOG00000053311	6	111534853	112074342	0.539489	25.63996948	21.1723077
ENSRNOG00000053332	3	173964332	174088179	0.123847	59.95953764	58.8402428
ENSRNOG00000053349	2	234507097	235614669	1.107572	8.725329693	5.522166429
ENSRNOG00000053383	14	71213727	72161699	0.947972	5.071217105	5.037561297
ENSRNOG00000053410	13	83007437	83783306	0.775869	5.859987186	5.650827146
ENSRNOG00000053468	7	139858527	141609085	1.750558	22.64459042	17.66790922
ENSRNOG00000053493	17	19000221	19114406	0.114185	11.44731144	7.35843185
ENSRNOG00000053498	7	139839301	141646974	1.807673	9.404165155	5.149938428
ENSRNOG00000053504	6	39529445	40831028	1.301583	8.051775338	5.083925919
ENSRNOG00000053560	19	56150634	57423799	1.273165	15.12134492	11.15235735
ENSRNOG00000053574	19	58691289	59563531	0.872242	5.887179999	5.234863754
ENSRNOG00000053588	20	13852042	14443816	0.591774	23.44749121	18.81430327
ENSRNOG00000053615	5	64756122	65053811	0.297689	10.37283657	6.533896656
ENSRNOG00000053624	7	97817306	99089086	1.27178	15.98844026	10.99044241
ENSRNOG00000053753	8	64137045	65824026	1.686981	13.79988946	8.964775649
ENSRNOG00000053790	12	29577038	30951867	1.374829	7.24203856	5.053609231
ENSRNOG00000053840	14	16386879	17919188	1.532309	7.130732843	5.049535759
ENSRNOG00000053893	16	10265971	11352420	1.086449	14.5389302	10.82656078
ENSRNOG00000053937	5	22793881	23887741	1.09386	9.719629462	5.107415144
ENSRNOG00000053961	10	45948658	47093905	1.145247	7.232488525	5.373075859
ENSRNOG00000054024	2	187645874	188891036	1.245162	12.0224366	7.844124573
ENSRNOG00000054026	1	216242822	217080283	0.837461	11.89230071	6.936010818
ENSRNOG00000054080	8	77606592	79037862	1.43127	12.3587526	7.463121218
ENSRNOG00000054108	8	65900418	66329026	0.428608	7.076501474	5.66737635
ENSRNOG00000054272	6	2666898	3666153	0.999255	11.85010884	6.851150716
ENSRNOG00000054331	14	106177573	107197986	1.020413	6.498693272	5.095878958
ENSRNOG00000054348	20	1965560	3327429	1.361869	13.62422322	8.838142269
ENSRNOG00000054420	7	138534537	140346254	1.811717	15.61084474	11.19791767
ENSRNOG00000054452	1	15649071	15821696	0.172625	5.396101688	5.187833179
ENSRNOG00000054495	X	110762085	110900012	0.137927	26.85845542	26.09661729
ENSRNOG00000054514	4	57779129	59805167	2.026038	10.55226574	5.954422705
ENSRNOG00000054531	14	104920940	106088694	1.167754	7.461491171	5.035365261
ENSRNOG00000054549	20	12366683	13247833	0.88115	21.91750153	17.20368403
ENSRNOG00000054562	19	19591198	21550297	1.959099	10.48845096	5.490298594

ENSRNOG00000054578	5	154142382	154829770	0.687388	14.9471514	10.52604963
ENSRNOG00000054579	2	250443539	250764732	0.321193	7.931473862	5.448539497
ENSRNOG00000054736	1	62119547	62947893	0.828346	23.68531768	19.40093132
ENSRNOG00000054819	6	6406959	6582878	0.175919	7.856641582	5.200560776
ENSRNOG00000054860	4	162313861	163541679	1.227818	15.69330835	11.04307813
ENSRNOG00000054953	18	29526456	31372168	1.845712	10.00741097	5.017616627
ENSRNOG00000054954	1	62860338	64552305	1.691967	8.662829659	5.136160461
ENSRNOG00000054955	1	212628977	212772082	0.143105	5.362562114	5.170317526
ENSRNOG00000054990	4	58303561	59156811	0.85325	6.434932106	5.070373007
ENSRNOG00000055010	10	96438924	97566968	1.128044	8.249645975	5.047044436
ENSRNOG00000055086	5	17850072	19334774	1.484702	7.19206493	5.252913554
ENSRNOG00000055226	3	15089609	15437423	0.347814	5.762881683	5.431164661
ENSRNOG00000055251	8	79257172	79778396	0.521224	7.28368508	5.050538515
ENSRNOG00000055259	1	80917879	81522930	0.605051	19.03192585	14.04803872
ENSRNOG00000055281	11	43986797	45158172	1.171375	8.92082322	6.268556296
ENSRNOG00000055283	12	43715214	44741469	1.026255	5.422083396	5.005394322
ENSRNOG00000055292	5	24739544	26202878	1.463334	12.32797632	7.525745218
ENSRNOG00000055314	10	13399207	15092074	1.692867	14.42768314	10.10917329
ENSRNOG00000055366	1	176774224	178315631	1.541407	8.386721324	5.146608181
ENSRNOG00000055411	1	264392346	264481779	0.089433	23.2210118	19.15945298
ENSRNOG00000055451	2	26871291	28290225	1.418934	11.20205643	6.227473415
ENSRNOG00000055499	16	11360857	11692672	0.331815	6.22917457	5.10231749
ENSRNOG00000055530	7	129488345	130076122	0.587777	6.715859024	5.015885119
ENSRNOG00000055547	1	49608605	50237923	0.629318	14.79083179	9.797802115
ENSRNOG00000055553	15	57470220	58725887	1.255667	8.305014307	5.03825535
ENSRNOG00000055608	1	80987529	81148993	0.161464	51.86782194	47.25017708
ENSRNOG00000055660	1	11502400	12687526	1.185126	6.906826835	5.020500001
ENSRNOG00000055721	X	110762085	110900012	0.137927	22.36670249	22.21680224
ENSRNOG00000055795	12	23101509	23168323	0.066814	5.304895312	5.150028721
ENSRNOG00000055878	9	104876100	105892334	1.016234	11.6287006	6.707271302
ENSRNOG00000055915	5	143745998	144729165	0.983167	6.423735705	5.085568317
ENSRNOG00000055934	1	88818756	88935025	0.116269	36.64467383	33.94794765
ENSRNOG00000055966	4	161880304	163487287	1.606983	19.37850079	14.61745771
ENSRNOG00000056012	6	96239023	97413105	1.174082	6.024567593	5.043354703
ENSRNOG00000056038	1	221270025	221499364	0.229339	5.481577146	5.02168896
ENSRNOG00000056060	1	251656690	252121468	0.464778	5.978471381	5.124423019
ENSRNOG00000056087	3	56789064	56832863	0.043799	5.490219898	5.206710349
ENSRNOG00000056098	1	63182170	64552305	1.370135	5.730946185	5.082113564
ENSRNOG00000056106	7	140705422	142229310	1.523888	7.163626912	5.025135907
ENSRNOG00000056151	2	21793266	21819395	0.026129	5.410425128	5.088874438
ENSRNOG00000056321	10	39457140	40015815	0.558675	5.12954426	5.104614501
ENSRNOG00000056322	1	178528043	178754366	0.226323	21.73653402	20.94560746
ENSRNOG00000056359	12	20845617	22188549	1.342932	16.26904192	11.92936857
ENSRNOG00000056431	13	73755239	74618788	0.863549	48.92382172	44.30269857
ENSRNOG00000056435	18	11558	866566	0.855008	8.222055608	5.024552219
ENSRNOG00000056476	8	127503740	127519112	0.015372	5.251767128	5.148342512

ENSRNOG00000056479	10	109604805	109805336	0.200531	5.888174639	5.42982511
ENSRNOG00000056562	1	170808074	172779019	1.970945	8.053507196	5.068546122
ENSRNOG00000056571	1	197916661	198791897	0.875236	6.024900578	5.143034926
ENSRNOG00000056620	1	227153906	228290113	1.136207	8.787753148	5.535444057
ENSRNOG00000056637	20	4557631	5181088	0.623457	13.06836913	8.48667433
ENSRNOG00000056647	20	29399308	29633758	0.23445	5.832635112	5.05508317
ENSRNOG00000056721	6	86600735	87156348	0.555613	17.75533879	14.57866294
ENSRNOG00000056722	14	104721095	106084324	1.363229	6.951907075	5.128325216
ENSRNOG00000056753	1	255027226	256074715	1.047489	5.830108825	5.43403352
ENSRNOG00000056756	6	103197306	104395263	1.197957	7.979103874	5.001124576
ENSRNOG00000056772	X	112141554	112426956	0.285402	5.39924725	5.030435788
ENSRNOG00000056819	5	75731369	77272531	1.541162	14.21724124	9.398856876
ENSRNOG00000056894	2	259434668	259766581	0.331913	6.703284219	5.024019176
ENSRNOG00000056944	14	7471165	9129492	1.658327	6.760412915	5.189645606
ENSRNOG00000056951	2	224621714	225017344	0.39563	5.560090323	5.206005733
ENSRNOG00000056972	3	120916199	121609655	0.693456	26.00589429	21.08347156
ENSRNOG00000057075	19	9535972	10163185	0.627213	10.74271667	6.590819905
ENSRNOG00000057120	10	55117392	56270290	1.152898	10.37987694	5.538169101
ENSRNOG00000057125	20	3123326	3769641	0.646315	28.03664425	24.20766277
ENSRNOG00000057161	17	27890572	29550574	1.660002	8.030123218	5.310529022
ENSRNOG00000057178	14	19062612	19093144	0.030532	5.838112999	5.255465028
ENSRNOG00000057240	10	48260213	48922031	0.661818	6.115651157	5.022508555
ENSRNOG00000057295	6	127280601	128440099	1.159498	12.88987922	8.981242931
ENSRNOG00000057304	8	65796213	67725758	1.929545	8.431449342	5.718222286
ENSRNOG00000057329	10	6895915	7620150	0.724235	5.729174542	5.069526454
ENSRNOG00000057400	13	91988517	93212349	1.223832	10.50932516	5.613016836
ENSRNOG00000057470	2	234672941	235882624	1.209683	14.98281212	10.17285818
ENSRNOG00000057496	1	127731187	128791751	1.060564	8.019730252	5.724601222
ENSRNOG00000057542	16	10183681	11289076	1.105395	8.68763857	5.016637086
ENSRNOG00000057601	19	56150634	57423799	1.273165	9.21561846	6.616920246
ENSRNOG00000057645	1	79219093	80332990	1.113897	42.19252347	37.29334097
ENSRNOG00000057734	10	103974104	105643908	1.669804	19.73561972	14.99745027
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ENSRNOG00000057813	6	25486805	27362384	1.875579	19.97221573	15.55716765
ENSRNOG00000057817	3	152282684	152535015	0.252331	24.47896571	22.62646195
ENSRNOG00000057851	13	74804741	75574508	0.769767	18.32046059	13.48944788
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ENSRNOG00000057927	12	22293107	22848107	0.555	12.28667643	7.379731596
ENSRNOG00000057931	15	57448476	58376610	0.928134	7.103334189	5.013559447
ENSRNOG00000057989	1	189632366	190852093	1.219727	15.44459972	10.79602288
ENSRNOG00000058003	1	178826586	178886448	0.059862	6.341516453	5.011613194
ENSRNOG00000058057	15	103937448	104880541	0.943093	17.80101424	13.7321868
ENSRNOG00000058068	10	44643136	45601570	0.958434	5.655782849	5.042715183
ENSRNOG00000058105	1	168010791	169963078	1.952287	9.314783071	5.208560236
ENSRNOG00000058115	X	136570099	138222022	1.651923	9.981211085	5.071548539
ENSRNOG00000058132	1	224361800	225018222	0.656422	12.43890708	9.291420434

ENSRNOG00000058238	20	3234049	3449967	0.215918	12.80082174	12.3481706
ENSRNOG00000058243	9	45587142	46839291	1.252149	17.0245343	12.42355993
ENSRNOG00000058412	8	96566117	98308426	1.742309	10.09143443	5.153543543
ENSRNOG00000058420	1	213796691	215733374	1.936683	12.98222253	8.161556411
ENSRNOG00000058434	14	80867748	82704653	1.836905	16.62154155	14.05504072
ENSRNOG00000058436	1	60603342	61695285	1.091943	6.184799372	5.095172648
ENSRNOG00000058476	5	134527830	136194437	1.666607	9.782392805	5.21342951
ENSRNOG00000058538	1	63182170	64288638	1.106468	24.32136182	19.3853663
ENSRNOG00000058598	7	134977789	135807253	0.829464	7.701214572	5.094749137
ENSRNOG00000058615	1	197002996	198323509	1.320513	23.0798522	19.57878141
ENSRNOG00000058645	5	78915804	80762112	1.846308	12.33793039	7.379738957
ENSRNOG00000058647	7	25495122	26684794	1.189672	16.62459985	14.03217809
ENSRNOG00000058681	9	44639477	45046140	0.406663	6.704848109	5.145168844
ENSRNOG00000058784	20	2226529	4107464	1.880935	7.461247394	5.011314316
ENSRNOG00000058829	18	823903	2303460	1.479557	6.10388553	5.181443719
ENSRNOG00000058852	20	3123326	3769641	0.646315	25.89958647	21.20622138
ENSRNOG00000058866	8	81535718	83132282	1.596564	6.59724192	5.207819692
ENSRNOG00000058912	20	7284029	8075954	0.791925	29.19518519	26.29953966
ENSRNOG00000058929	13	77492639	78763150	1.270511	6.108067627	5.095507354
ENSRNOG00000058987	20	4554839	5526405	0.971566	8.890243793	5.153823595
ENSRNOG00000059010	14	1002973	2823146	1.820173	34.53787725	29.69661723
ENSRNOG00000059057	16	10529339	10882533	0.353194	9.847049077	5.364182205
ENSRNOG00000059160	5	164802795	164886230	0.083435	6.544420196	5.596073755
ENSRNOG00000059170	18	61405652	63101045	1.695393	9.324551193	5.085517024
ENSRNOG00000059224	1	12718421	14027925	1.309504	7.859398004	5.042545389
ENSRNOG00000059243	3	21143682	22049437	0.905755	14.90983407	10.00420454
ENSRNOG00000059245	6	102294101	102478989	0.184888	5.863315687	5.330030176
ENSRNOG00000059270	10	75387845	76787535	1.39969	7.123792148	5.046326885
ENSRNOG00000059322	12	702588	1403313	0.700725	10.72840853	6.218895682
ENSRNOG00000059326	10	98472714	98982045	0.509331	13.93902033	9.073119489
ENSRNOG00000059385	13	44682682	46547813	1.865131	9.235862486	5.098556878
ENSRNOG00000059479	14	87333162	87445743	0.112581	7.03263722	6.128643445
ENSRNOG00000059483	6	56370443	57882441	1.511998	5.846655448	5.013449464
ENSRNOG00000059497	8	112360652	112983607	0.622955	6.865170017	5.076985385
ENSRNOG00000059702	8	78223393	79502402	1.279009	21.14441547	17.96167769
ENSRNOG00000059744	7	55427242	55575372	0.14813	5.093420124	5.04945359
ENSRNOG00000059765	7	140346254	142229310	1.883056	26.52037333	22.40485039
ENSRNOG00000059840	17	9193054	10309452	1.116398	26.67344819	22.14638152
ENSRNOG00000059851	8	52375755	52778959	0.403204	14.37436481	9.636148574
ENSRNOG00000059876	5	70185911	71245199	1.059288	7.031003224	5.180689816
ENSRNOG00000059947	6	34106260	34864623	0.758363	7.767983267	5.14704637
ENSRNOG00000059950	14	3215367	4784837	1.56947	18.22292085	14.49832662
ENSRNOG00000059997	10	73514175	74216477	0.702302	7.300417926	5.006877798
ENSRNOG00000060021	1	12380423	13472596	1.092173	12.87047011	7.873250579
ENSRNOG00000060045	11	87428045	88962883	1.534838	7.674721702	5.001033115
ENSRNOG00000060061	10	38040642	39742193	1.701551	9.302056093	5.20004669

ENSRNOG00000060105	5	80199026	82817164	2.618138	9.981039089	5.137397298
ENSRNOG00000060107	2	242785497	244103347	1.31785	7.084234864	5.042273923
ENSRNOG00000060120	7	130132778	130443383	0.310605	5.374303325	5.059978145
ENSRNOG00000060129	12	11266122	11676311	0.410189	5.207614439	5.033277182
ENSRNOG00000060181	5	160786579	161996073	1.209494	10.04574166	5.094675947
ENSRNOG00000060193	10	93600642	95277850	1.677208	9.107306953	5.011529525
ENSRNOG00000060266	17	35075983	35325071	0.249088	26.03802247	24.62039475
ENSRNOG00000060284	1	11502400	12770001	1.267601	15.14159844	10.15445906
ENSRNOG00000060349	4	49191148	49845303	0.654155	14.70799776	11.32037727
ENSRNOG00000060356	8	131712054	132913499	1.201445	35.5113337	33.89169591
ENSRNOG00000060407	7	121265677	122230734	0.965057	37.78717831	33.49336591
ENSRNOG00000060422	11	76059324	76981156	0.921832	28.41705895	23.68812158
ENSRNOG00000060478	5	154142382	154462997	0.320615	37.47257747	32.87008615
ENSRNOG00000060486	X	45416225	45687547	0.271322	5.282138765	5.19462502
ENSRNOG00000060523	20	3123326	3769641	0.646315	20.58714819	15.85635797
ENSRNOG00000060524	10	81969187	82080791	0.111604	5.504900839	5.074849555
ENSRNOG00000060528	10	81977999	82867796	0.889797	17.19931639	14.51789304
ENSRNOG00000060578	9	65546202	66916044	1.369842	7.091247329	5.210372732
ENSRNOG00000060614	6	48815336	48835378	0.020042	5.019593784	5.008263945
ENSRNOG00000060670	7	69203984	70004994	0.80101	39.55854779	35.24687745
ENSRNOG00000060680	17	23221254	24533965	1.312711	9.840321177	6.0941106
ENSRNOG00000060732	17	20450491	21087430	0.636939	10.35276378	5.527448011
ENSRNOG00000060773	13	110709916	112509968	1.800052	8.716584811	5.054454652
ENSRNOG00000060775	15	85853881	86390419	0.536538	6.357619956	5.225528395
ENSRNOG00000060829	18	29031074	30462175	1.431101	8.879189854	5.040662275
ENSRNOG00000060972	1	12689565	13383856	0.694291	6.388659661	5.680238138
ENSRNOG00000061026	16	10411796	11476497	1.064701	27.28253144	22.53145243
ENSRNOG00000061065	14	7293965	7966332	0.672367	5.968835025	5.119592004
ENSRNOG00000061095	12	24674099	25321760	0.647661	10.26156533	5.293184197
ENSRNOG00000061147	1	241620430	242005201	0.384771	7.444301954	6.061864829
ENSRNOG00000061201	6	75290990	76363747	1.072757	19.59900904	14.65399359
ENSRNOG00000061216	20	3284640	3530743	0.246103	5.442105006	5.142376718
ENSRNOG00000061299	1	168033735	168969209	0.935474	6.472915872	5.446401226
ENSRNOG00000061315	1	89407557	90651749	1.244192	15.23319041	10.85229858
ENSRNOG00000061316	1	1521157	2141593	0.620436	14.401291	9.483171377
ENSRNOG00000061346	12	6079710	6822067	0.742357	24.70869653	20.10335142
ENSRNOG00000061348	1	203878423	205020974	1.142551	13.01899112	8.352918316
ENSRNOG00000061353	8	21603944	21864888	0.260944	7.454985276	5.106044621
ENSRNOG00000061394	4	155479278	157240578	1.7613	11.75893733	6.945150435
ENSRNOG00000061408	1	262017763	262181524	0.163761	5.175706157	5.13039855
ENSRNOG00000061420	4	161880304	163541679	1.661375	29.50902423	25.89540332
ENSRNOG00000061429	10	64984312	65043421	0.059109	5.391554931	5.3067962
ENSRNOG00000061485	1	277937609	278765446	0.827837	6.270059972	5.023747587
ENSRNOG00000061488	16	82784329	83901454	1.117125	8.183065439	5.08730508
ENSRNOG00000061597	1	227154651	227900292	0.745641	8.271553299	5.191697101
ENSRNOG00000061639	20	4548233	5176859	0.628626	15.56363126	11.74835858

ENSRNOG00000061658	11	33350045	34602064	1.252019	5.864820274	5.19361522
ENSRNOG00000061680	9	15658747	16704520	1.045773	16.33130741	11.35535047
ENSRNOG00000061739	4	162767550	163502018	0.734468	5.727995058	5.151412876
ENSRNOG00000061754	5	24069065	24260509	0.191444	17.72148344	14.34034192
ENSRNOG00000061764	13	91927895	92706326	0.778431	11.39891041	6.445518177
ENSRNOG00000061835	20	29046926	30459798	1.412872	18.83073723	13.87684283
ENSRNOG00000061928	8	75764006	77792677	2.028671	6.62109342	5.243992158
ENSRNOG00000061954	20	1965560	3854652	1.889092	8.689027374	5.041570002
ENSRNOG00000061962	12	9621487	11171808	1.550321	8.347166528	5.061436545
ENSRNOG00000061991	20	4582624	5467464	0.88484	5.781358425	5.058234751
ENSRNOG00000061996	20	5161900	5176859	0.014959	21.84264309	21.84264309
ENSRNOG00000061998	20	4594669	6253792	1.659123	9.156288238	5.013035918
ENSRNOG00000062039	20	4614737	5164742	0.550005	38.41238647	34.09777811
ENSRNOG00000062086	1	242858182	243828590	0.970408	11.51070579	6.972573081
ENSRNOG00000062125	9	64023451	65650536	1.627085	10.86292479	5.923325635
ENSRNOG00000062154	9	64177839	65646311	1.468472	7.130042043	5.238600144
ENSRNOG00000062164	1	220815254	222397591	1.582337	13.51644526	8.536306408
ENSRNOG00000062177	7	107640470	109319490	1.67902	12.50025751	7.581971947
ENSRNOG00000062252	3	9744381	10743487	0.999106	11.10734357	6.96800963
ENSRNOG00000062271	8	64957140	66930900	1.97376	6.946945237	5.080237465
ENSRNOG00000062279	15	93608979	93805040	0.196061	6.283661059	5.545873762
ENSRNOG00000062306	7	14508843	15453726	0.944883	5.649560435	5.029816732

Peak marker	Gene information			
	Chr	Start	End	Gene name
chr13_48996483	13	49092306	49109050	Nuak2
chr14_1098762	14	1937041	1957579	Tmed11
chr13_73123776	13	72861090	72893187	RGD1304622
chr14_1098762	14	2042411	2056762	Idua
chr3_82374470	3	82324354	82368357	Cd82
chr13_110733104	13	110033550	110077946	Ppp2r5a
chr14_2148659	14	2613406	2633950	Tmed5
chr2_199129418	2	198999946	199038702	Gpr89b
chr15_58706421	15	57755189	57805184	Cog3
chr3_114904351	3	114711562	114728410	Gatm
chr3_114241518	3	114900343	114939370	Sqor
chr7_12223863	7	13062196	13070280	Plpp2
chr7_119582427	7	119616324	119623072	Tst
chr10_36334387	10	36345939	36360665	Grm6
chr10_97368606	10	97735548	97756521	Slc16a6
chr20_48928581	20	48881194	48925081	Rtn4ip1
chr20_46878463	20	46250363	46261994	Cd164
chr20_46563713	20	46211892	46215120	Smpd2
chr20_51700124	20	50652745	50783937	Hace1
chr20_27396102	20	27103317	27117663	Pbld1
chr20_3854652	20	4392626	4396250	Prrt1
chr20_4976062	20	4329811	4353785	Notch4
chr20_5526405	20	5432004	5441706	Vps52
chr20_5429360	20	5480103	5485926	Daxx
chr20_5581788	20	5619012	5625320	Ggnbp1
chr20_7146804	20	7431355	7471900	Uhrf1bp1
chr20_7826313	20	7788084	7809560	Def6
chr20_8123668	20	7895083	7906142	Fance
chr20_5982176	20	5933303	5995137	Mapk14
chr20_5982176	20	6419033	6500523	Cpne5
chr20_7290651	20	6923489	6932786	Pi16
chr20_8200326	20	8369331	8384088	Ccdc167
chr20_41054039	20	41106991	41209728	Nt5dc1
chr20_31295826	20	31265483	31310674	Ppa1
chr20_29191974	20	29544629	29558321	Anapc16
chr20_48688225	20	48503973	48574546	Cdc40
chr20_45450497	20	45094791	45107555	Naglt1
chr20_43088834	20	43084870	43108198	Hdac2
chr20_22149951	20	21564975	21880715	Arid5b
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chr16_11625408	16	11599753	11932324	Grid1
chr7_130076122	7	130042947	130053032	Panx2
chr1_50235295	1	49290112	49844547	AABR07001519.1
chr15_57750222	15	57894100	57894229	RF00322
chr1_81148993	1	81159107	81163689	LOC102548695
chr1_12402398	1	12400648	12410192	AABR07000433.1
chrX_110900012	X	110789269	110877978	Rnf128
chr12_23101509	12	24091218	24091580	AABR07035832.1
chr9_105719348	9	105807222	105828494	AABR07068447.1
chr5_144066065	5	144448792	144479306	Ago1
chr1_88818756	1	89215266	89229696	Dmkn
chr4_162051358	4	162493908	162499342	AABR07062138.2
chr6_96980113	6	97110158	97198899	Syt16
chr1_221499364	1	221062147	221084129	Ehbp111
chr1_251856345	1	251633199	251634381	AC094647.2
chr3_56789064	3	56802714	56838918	Erich2
chr1_64552305	1	64162672	64172470	Tfpt
chr7_141315868	7	141702038	141879951	Dip2b
chr2_21793266	2	21559368	21698937	AABR07007642.1
chr10_40015815	10	40373643	40373898	AC093965.2
chr1_178751165	1	178595805	178608096	AABR07071969.1
chr12_22102480	12	21412538	21420169	AABR07035722.1
chr13_74104769	13	74611854	74617038	AABR07021492.1
chr18_866566	18	408219	410098	LOC102546764
chr8_127519112	8	127885268	127900463	Slc22a13

chr10_109604805	10	110408838	110408956	RF00568
chr1_172773539	1	171793782	171818068	Olfml1
chr1_198791897	1	198162429	198168448	AABR07005779.7
chr1_227589959	1	227287194	227290294	AABR07006263.1
chr20_5139722	20	5080070	5094935	Abhd16a
chr20_29633758	20	29558689	29648893	Ascc1
chr6_86600735	6	86823684	86876633	Fancm
chr14_104762456	14	105083805	105085260	AABR07016578.3
chr1_255685126	1	255185629	255254307	Hectd2
chr6_103288612	6	103375799	103470555	Actn1
chrX_112426956	X	112405647	112473822	Col4a6
chr5_76870295	5	76416739	76632462	Susd1
chr2_259709689	2	259379509	259898525	St6galnac3
chr14_7587798	14	8383214	8600512	Arhgap24
chr2_224731080	2	224408346	224418974	AABR07013140.1
chr3_121609655	3	121567761	121568414	AABR07053710.2
chr19_9535972	19	9729502	9729636	RF00404
chr10_55743291	10	55593661	55593800	RF00409
chr20_3677731	20	3552929	3575780	Ddr1
chr17_29366234	17	28825009	28829441	AABR07027407.1
chr14_19093144	14	18844709	18846281	AABR07014512.1
chr10_48260213	10	48927721	48927791	RF00277
chr6_127280601	6	128152343	128153063	AABR07065424.1
chr8_67150859	8	66730387	66739350	LOC102552398
chr10_6895915	10	6888790	6889982	AC129395.2
chr13_92347643	13	92249759	92250724	Olr1596
chr2_234672941	2	235311719	235327972	Pla2g12a
chr1_128073675	1	128398115	128419758	LOC103691157
chr16_11215302	16	10294931	10296341	Zfp488
chr19_57147694	19	56443632	56443869	AABR07044080.2
chr1_80332990	1	79754587	79772092	Micb
chr10_104934420	10	104917862	104921866	LOC100909671
chr8_131892033	8	132251879	132252010	RF00560
chr6_25636194	6	26390689	26485049	AABR07063281.1
chr3_152535015	3	152552822	152619722	LOC100911769
chr13_75115224	13	75059927	75066823	LOC680254
chr8_79526004	8	79054237	79075122	Mns1
chr12_22710433	12	22601608	22605139	AABR07035796.1
chr15_58275015	15	58307768	58308234	AABR07018447.1
chr1_190484547	1	189899892	189911650	Zp2
chr1_178886448	1	178636544	178935051	Spon1
chr15_103937448	15	104235678	104394322	AABR07019403.1
chr10_45193901	10	45338009	45481008	Obscn
chr1_168273416	1	168971274	168972725	Hbb
chrX_137993695	X	137473483	137482303	AABR07041709.1
chr1_224361800	1	224923099	224923162	RF00070

chr20_3309447	20	2540864	2541440	AC120486.9
chr9_45587142	9	46414564	46475040	Rfx8
chr8_97596277	8	97474092	97494834	Morf4l1
chr1_215487052	1	214747625	214756309	AABR07006033.1
chr14_82704653	14	81687021	81725181	Cfap99
chr1_61662032	1	61445672	61509765	LOC108348215
chr5_135014399	5	135149307	135285337	Mast2
chr1_64143848	1	63964155	63967366	AABR07002001.1
chr7_135202122	7	134978809	134988669	LOC108351533
chr1_198323509	1	197983358	197983464	RF00026
chr5_80424215	5	79789671	79874671	Tnc
chr7_26192970	7	26440459	26457612	AABR07056470.1
chr9_45046140	9	44351951	44456554	Tsga10
chr20_3712510	20	3170034	3199279	AABR07044362.4
chr18_1726372	18	1758372	1758996	AABR07031150.1
chr20_3185771	20	3159469	3160066	AABR07044362.5
chr8_82575690	8	82037977	82156617	Myo5a
chr20_8075954	20	7330250	7361559	LOC499407
chr13_77918542	13	78079539	78079678	RF00272
chr20_5161900	20	4900092	4901178	AABR07044408.3
chr14_1098762	14	1959610	1998102	Rnf212
chr16_10729649	16	10570314	10661528	Shld2
chr5_164802795	5	163867961	163902934	AABR07050399.2
chr18_62540124	18	62227385	62234905	LOC102551356
chr1_14008820	1	13212324	13298347	Reps1
chr3_21722468	3	21373213	21381013	AABR07051787.1
chr6_102478989	6	102477036	102512505	Rad51b
chr10_76758974	10	76363797	76364091	AC119015.4
chr12_847021	12	546760	576746	N4bp2l1
chr10_98613132	10	98412263	98469799	Abca9
chr13_46267370	13	45575068	45575938	AABR07020905.1
chr14_87333162	14	87312203	87421659	Adcy1
chr6_57054713	6	57104255	57104360	RF00026
chr8_112869302	8	112827490	112831002	AABR07071383.1
chr8_78223393	8	79083522	79119720	Tex9
chr7_55427242	7	55600889	55604403	Atxn7l3b
chr7_140809208	7	141326321	141354937	Asic1
chr17_9962859	17	10153994	10208360	Unc5a
chr8_52410094	8	52729003	52733504	AABR07070117.1
chr5_70185964	5	70441123	70511659	Fsd1l
chr6_34106260	6	33885495	33908016	Sdc1
chr14_4401671	14	3792041	3793270	AABR07014158.1
chr10_73955991	10	73507100	73629581	Brip1
chr1_13341973	1	12915734	12961670	Txlnb
chr11_88892418	11	87858453	87973422	Pi4ka
chr10_39620310	10	38836614	38838272	Sowaha

chr5_81628687	5	81179605	82168427	Astn2
chr2_243362099	2	243018975	243151933	Dnajb14
chr7_130132778	7	130071122	130082014	Selenoo
chr12_11266122	12	11127754	11144754	Zfp655
chr5_161191222	5	161035009	161035368	AABR07050321.2
chr10_94594629	10	94566928	94569366	Prr29
chr17_35075983	17	34665872	34842266	LOC103689971
chr1_12553353	1	12483436	12485729	AABR07000436.1
chr4_49455066	4	49387989	49439867	Fam3c
chr8_131892033	8	132032944	132103927	Kif15
chr7_121328182	7	121511097	121619283	Cacna1i
chr11_76322713	11	76806359	76812949	AC120076.1
chr5_154462997	5	154438062	154438361	AC141344.2
chrX_45687547	X	45410546	45419817	Ptges3l1
chr20_3677731	20	3134704	3135301	AABR07044362.6
chr10_81969187	10	82738276	82743304	AABR07030366.1
chr10_82242596	10	82129506	82197848	Cacna1g
chr9_66539548	9	66500885	66500971	RF00575
chr6_48815336	6	48866601	48980340	Pxdn
chr7_69203984	7	69338452	69340275	AABR07057385.1
chr17_23806294	17	23792568	23805069	AABR07027309.1
chr17_20545938	17	20636813	20668903	AABR07027235.2
chr13_111078509	13	111574609	111581019	Sertad4
chr15_85895551	15	86243148	86457739	Lmo7
chr18_30020826	18	29535280	29543121	AC125248.1
chr1_12877177	1	13036909	13050644	Heca
chr16_10411796	16	10489450	10490706	Npy4r
chr14_7293965	14	7685714	7686018	RF00100
chr12_24818169	12	24679690	24679822	RF00601
chr1_241844525	1	241822626	241875864	Fam189a2
chr6_76363747	6	75622796	75622959	RF00003
chr20_3530743	20	3422461	3426371	Tubb5
chr1_168336907	1	168957460	168958836	LOC100134871
chr1_90649999	1	89649636	89682737	AABR07002928.2
chr1_1690027	1	1180932	1220916	LOC102547056
chr12_6267342	12	6403940	6473321	B3glct
chr1_204543956	1	204714473	204817080	Fam53b
chr8_21603944	8	21823121	21823212	RF00100
chr4_156338431	4	156270920	156276304	Clec4e
chr1_262181524	1	261989467	261991896	AC096317.4
chr4_163294778	4	162830407	162831983	AABR07062154.1
chr10_64984312	10	63989644	64108554	Rph3al
chr1_278328622	1	278161295	278178451	AABR07007035.1
chr16_83359465	16	83196133	83205817	AABR07026557.2
chr1_227609417	1	227331649	227359809	AABR07006264.2
chr20_4548233	20	4673843	4792450	AABR07044404.1

chr11_34046800	11	33789872	33790024	RF00015
chr9_16525772	9	16513857	16513987	RF00413
chr4_163341763	4	163393217	163403653	Klrk1
chr5_24224301	5	24220336	24226331	LOC102555924
chr13_92551359	13	92569785	92672821	AABR07021812.1
chr20_30196729	20	30041461	30263742	AABR07044980.1
chr8_76695391	8	76754492	76839593	Myo1e
chr20_2011127	20	2878047	2878560	AABR07044339.1
chr12_10274628	12	10587811	10588312	AABR07035339.1
chr20_5467464	20	5467942	5468658	AC128962.1
chr20_5161900	20	5346501	5347801	AABR07044420.1
chr20_5593673	20	5351611	5354095	AABR07044421.1
chr20_4996174	20	5347666	5347939	AABR07044420.2
chr1_243232785	1	243159251	243159844	AABR07006627.2
chr9_64023451	9	65013862	65099433	Aox3
chr9_64204963	9	65089965	65146672	AABR07067810.1
chr1_221165359	1	221508159	221512116	AC120237.2
chr7_109319490	7	108377970	108382543	AABR07058280.2
chr3_10604950	3	10384888	10432854	AABR07072853.4
chr8_65477132	8	65932783	65937987	AABR07070329.1
chr15_93805040	15	93634820	93639250	AABR07019209.2
chr7_15453726	7	14528822	14545751	Cyp4f17

Supplement Table 7. List of genes in liver and adipose with cis e

Phenotype	CHR	pQTL interval		
		Start	End	Size (Mb)
TRIG	1	280.62	282.13	1.5
EpiFat	1	280.62	282.13	1.5
EpiFat/BW	1	280.62	282.13	1.5
RetroFat	1	280.62	282.13	1.5
RetroFat/BW	1	280.62	282.13	1.5
RetroFat/BW	3	92.3	98.31	6.01
CHOL	6	29.47	31.22	1.76
TRIG	6	27.2	27.78	0.59
RetroFat	6	23.12	31.24	8.12
RetroFat/BW	6	23.12	31.24	8.12
BWGain	7	40.02	44.07	4.05
CHOL	8	50.04	51.55	1.51
TRIG	8	49.65	50.03	0.38
BWGain	10	101.53	102.03	0.49
CHOL	12	34.48	36.91	2.43
BLTail	12	0.7	6.49	5.79
BLTail	14	19.94	24.13	4.19
BW	19	51.87	54.4	2.53
EpiFat	19	51.87	54.44	2.57
BLNoTail	19	51.87	54.44	2.57
EpiFat/BW	20	7.28	8.08	0.79
WPIC	20	31.43	32.83	1.40

QTLs mapped within SNP-based pQTLs

Liver
Cacul1
Cacul1
Cacul1
Cacul1
Cacul1
Pamr1;RGD1563222;Ccdc73;Caprin1
Fam228b
Atraid;Mpv17;Slc30a3;Hadhb;Dpysl5;Nrpb1;Krtcap3
Atraid;AABR07063281.1;Mpv17;Slc30a3;Hadhb;Dpysl5;Fam228b;Ypel5;Rbks;Adcy3;Galnt14;Nrpb1;Krtcap3
Atraid;AABR07063281.1;Mpv17;Slc30a3;Hadhb;Dpysl5;Fam228b;Ypel5;Rbks;Adcy3;Galnt14;Nrpb1;Krtcap3
Tmtc3
Bace1;Fxyd2;Bud13;Apoc3;Rnf214
Fxyd2;Jam1;Rps25;Rnf214
Cog1;Slc39a11
Bri3bp;Dhx37;Scarb1
B3glct;Lrrc8e;Pet100;AABR07035107.1;Fcer2;Pex11g
Ugt2a3;Sult1d1;Sult1b1;Ugt2b35;AC114845.1;RGD1559459;Ugt2b37;Sult1e1;Rassf6;Afm;Uba6
AABR07044001.3;AABR07044001.4;RGD1309651;Mlycd;Dnaaf1;Tldc1;Emc8;Usp10
Usp10;AABR07044001.3;AABR07044001.4;RGD1309651;Emc8;Dnaaf1;Mlycd;Tldc1
AABR07044001.3;AABR07044001.4;RGD1309651;Mlycd;Dnaaf1;Tldc1;Emc8;Usp10
Pi16;Snrpc;Scube3;Rps10;Rnf8;RGD735065;Ilrun
Rfx6;Col13a1;H2afy2;Kif1bp

Genes with cis eQTLs
Adipose
Grk5
Grk5
Grk5
Grk5
Grk5
Lmo2;Pdhx;Rcn1;RGD1563222;Tcp11l1
Dnajc27
AABR07063279.1;Dnajc27;AABR07063281.1;Atraid;Garem2;Nrpb1;Dnmt3a
Gpn1;Alk;AABR07063279.1;Dnajc27;Togaram2;AABR07063281.1;Capn13;Atraid;Garem2;Nrpb1;Clip4
Gpn1;Alk;AABR07063279.1;Dnajc27;Togaram2;AABR07063281.1;Capn13;Atraid;Garem2;Nrpb1;Clip4
Tmtc3
Fxyd2;Bace1;Rnf214;Tmprss4
Fxyd2;Mpzl2;Bace1;Smim35;Tmprss4
Sdk2;Slc39a11;Cdc42ep4;Cog1
Dhx37
N4bp2l1;Cd209;Cd209e;B3glct;Hsph1;Kl;Clec4m;Arhgef18;Retn;Pet100;Cers4;Stard13;Snapc2
Mir6321;Alb;Afp;LOC360919;Sult1d1
Cdh13;Tldc1;Slc38a8
Cdh13;Slc38a8;Tldc1
Cdh13;Tldc1;Slc38a8
Fance;Rnf8;Uhrf1bp1;Cpne5;Ccadc167;Pi16;Def6;Ilrun;LOC499407;Taf11
Tspan15;Ppa1;Vps26a

Supplement Table 8. Correlations between physiological tra

Liver

	Bri3bp	Dhx37	Scarb1	Fam228b	Bace1
BW	0.06	0.02	0.01	-0.03	0.04
RetroFat	-0.01	-0.04	0.14	-0.21	0.01
RetroFat/BW	-0.04	-0.05	0.16	-0.25	-0.01
BLNoTail	0.02	0.02	0.01	-0.07	0.03
BLTail	0.00	0.01	-0.03	0.01	0.04
CHOL	-0.02	-0.05	0.11	-0.14	-0.08
TRIG	0.06	-0.06	0.03	-0.10	-0.12
WPIC	0.03	-0.05	0.03	-0.05	-0.03
BWGain	0.02	-0.04	-0.04	-0.06	0.02
EpiFat/BW	0.01	0.02	0.13	-0.09	0.01
EpiFat	0.03	0.01	0.11	-0.09	0.01

Adipose

	Dhx37	Dnajc27	Fxyd2	Bace1	Rnf214
BW	-0.064	0.021	0.168	-0.197	-0.128
RetroFat	-0.097	0.246	0.063	-0.098	-0.034
RetroFat/BW	-0.093	0.275	0.010	-0.043	0.015
BLNoTail	0.011	0.054	0.127	-0.113	-0.054
BLTail	-0.008	0.003	0.151	-0.146	-0.045
CHOL	-0.115	0.146	0.084	-0.098	-0.043
TRIG	-0.117	0.195	-0.003	-0.082	0.058
WPIC	-0.003	0.043	-0.012	-0.038	0.004
BWGain	0.020	0.037	0.010	0.028	-0.015
EpiFat/BW	-0.134	0.210	0.089	-0.044	-0.005
EpiFat	-0.134	0.187	0.130	-0.105	-0.048

Note: For each row, genes with yellow background are ones having cis eQTL that fall withi

it and expression of genes (both trait and gene expression were 1

Fxyd2	Bud13	Apoc3	Rnf214	Cacul1	Atraid	Mpv17
-0.03	-0.07	0.13	0.04	0.05	-0.04	0.03
-0.07	-0.05	0.27	-0.04	-0.01	-0.02	0.04
-0.07	-0.03	0.28	-0.05	-0.03	-0.02	0.03
0.01	0.02	0.09	0.06	0.04	-0.04	0.01
-0.01	0.00	0.04	0.02	0.05	0.01	0.03
-0.05	-0.04	0.20	-0.03	0.03	0.02	0.01
0.03	-0.11	0.23	-0.07	-0.03	0.01	0.02
-0.01	0.03	0.09	-0.05	0.06	-0.03	-0.02
0.02	-0.04	0.03	-0.10	-0.01	0.02	0.03
-0.06	0.04	0.20	0.03	0.06	-0.10	-0.05
-0.06	0.01	0.21	0.03	0.07	-0.09	-0.02

Tmprss4	Grk5	AABR070632	AABR070632	Atraid	Garem2	Nrbp1
-0.016	0.125	0.145	-0.139	-0.035	-0.084	0.019
-0.139	0.141	0.179	-0.092	0.019	-0.180	-0.097
-0.161	0.114	0.155	-0.051	0.041	-0.178	-0.112
0.007	0.103	0.120	-0.086	-0.069	-0.067	-0.001
0.045	0.025	0.123	-0.123	-0.027	-0.017	0.009
-0.061	0.176	0.071	-0.062	-0.054	-0.089	-0.048
-0.009	0.156	0.098	-0.048	0.038	-0.089	-0.092
-0.078	0.018	-0.020	0.077	0.021	-0.024	0.027
-0.014	0.062	0.003	-0.042	-0.021	-0.053	-0.091
-0.077	0.117	0.133	-0.030	-0.065	-0.143	-0.046
-0.072	0.145	0.163	-0.077	-0.071	-0.154	-0.043

in pQTL of that physiological trait. Some of those genes were identified as partial or full mediator

transformed using RINT/ or TRINT for GlucAUC)

Slc30a3	Hadhb	Dpysl5	Nrbp1	Krtcap3	Jaml	Rps25
-0.10	-0.03	-0.06	-0.09	-0.14	0.06	-0.03
-0.15	0.10	-0.18	-0.12	-0.25	0.07	0.01
-0.14	0.13	-0.18	-0.09	-0.24	0.05	0.02
-0.07	-0.01	-0.01	-0.06	-0.09	0.06	-0.01
0.00	-0.06	-0.03	-0.09	-0.09	0.00	-0.03
-0.12	0.03	-0.09	-0.09	-0.14	-0.01	-0.07
-0.08	0.08	-0.08	-0.04	-0.13	-0.01	0.01
-0.09	0.11	-0.04	-0.01	-0.02	0.02	0.00
0.01	0.02	-0.08	-0.16	-0.05	0.04	-0.01
-0.09	0.11	-0.06	-0.02	-0.14	0.07	0.02
-0.11	0.08	-0.08	-0.06	-0.17	0.08	0.01

Dnmt3a	Mpzl2	Smim35	Sdk2	Slc39a11	Cdc42ep4	Cog1
0.015	-0.249	0.092	0.141	0.050	0.033	-0.020
0.173	-0.304	0.135	0.101	0.205	-0.062	0.106
0.200	-0.267	0.129	0.063	0.217	-0.083	0.135
-0.004	-0.186	0.112	0.127	-0.001	0.059	0.014
-0.006	-0.102	0.091	0.125	-0.031	0.094	-0.028
0.094	-0.159	0.042	-0.009	0.048	-0.017	-0.011
0.166	-0.150	0.123	0.041	0.059	-0.060	-0.019
-0.001	-0.152	0.045	-0.005	0.066	0.104	0.155
0.011	0.012	-0.029	0.065	0.125	-0.016	-0.021
0.091	-0.305	0.098	0.088	0.090	-0.039	-0.046
0.086	-0.339	0.114	0.125	0.098	-0.025	-0.046

of that trait in mediation analysis.

Cog1	Slc39a11	Tmtc3	AABR0704400	AABR0704400	RGD1309651	Mlycd
-0.08	0.01	0.01	-0.08	-0.06	-0.20	0.01
0.05	0.03	-0.02	-0.18	-0.24	-0.19	0.13
0.09	0.04	-0.04	-0.18	-0.26	-0.14	0.14
-0.02	-0.08	0.02	0.01	-0.08	-0.11	0.02
-0.06	-0.02	0.00	0.05	0.04	-0.11	-0.05
0.03	0.02	0.01	-0.13	-0.19	-0.16	0.04
0.05	-0.04	0.02	-0.10	-0.15	-0.12	0.02
0.03	-0.03	0.01	-0.05	-0.08	-0.08	0.10
-0.06	-0.03	0.07	0.00	-0.02	-0.10	0.06
0.02	-0.03	-0.02	-0.12	-0.21	-0.18	0.11
-0.02	-0.03	-0.01	-0.12	-0.20	-0.23	0.10

Tmtc3	Cdh13	Tlhc1	Slc38a8	Fance	Rnf8	Uhrf1bp1
0.075	-0.024	0.100	-0.045	-0.105	-0.122	0.036
0.057	-0.040	0.185	-0.019	-0.083	-0.091	-0.069
0.032	-0.045	0.184	-0.010	-0.057	-0.056	-0.094
0.086	-0.018	0.074	-0.100	-0.127	-0.113	0.017
0.111	-0.021	0.074	-0.105	-0.138	-0.079	0.071
0.040	0.020	0.029	0.037	-0.021	-0.052	-0.036
0.002	-0.023	0.070	-0.005	0.038	-0.009	-0.144
-0.042	0.036	0.052	-0.022	0.025	0.036	0.089
0.020	0.034	0.000	0.024	0.019	-0.010	0.005
0.097	-0.048	0.138	-0.014	-0.094	-0.053	-0.148
0.113	-0.049	0.153	-0.026	-0.115	-0.088	-0.111

Dnaaf1	Tldc1	Emc8	Usp10	Pi16	Snrpc	Scube3
-0.07	-0.02	-0.17	0.01	0.06	-0.01	-0.06
-0.02	-0.07	-0.12	0.04	0.02	-0.08	-0.11
0.01	-0.07	-0.08	0.05	0.00	-0.09	-0.11
-0.10	0.03	-0.15	0.05	0.02	0.03	0.00
-0.09	0.02	-0.12	0.01	0.02	0.02	-0.01
0.00	-0.10	-0.09	0.01	-0.02	-0.08	-0.06
-0.03	-0.11	-0.14	0.04	0.01	-0.18	-0.01
0.02	-0.04	-0.02	-0.01	-0.01	-0.04	0.00
-0.03	-0.07	-0.09	0.01	-0.02	-0.09	-0.06
0.03	-0.03	-0.16	0.05	0.04	-0.12	-0.06
0.00	-0.04	-0.20	0.05	0.05	-0.11	-0.08

Cpne5	Ccdc167	Pi16	Def6	Ilrun	LOC499407	Taf11
0.014	0.024	0.003	0.162	-0.082	-0.161	-0.010
-0.007	0.131	-0.056	0.102	0.069	-0.083	-0.099
-0.018	0.146	-0.071	0.064	0.110	-0.036	-0.120
0.059	0.073	-0.002	0.107	-0.057	-0.112	0.003
0.054	-0.015	0.040	0.099	-0.057	-0.087	0.019
-0.053	0.097	-0.021	0.068	0.021	-0.059	-0.002
-0.016	0.094	-0.101	-0.028	0.109	0.017	-0.039
-0.071	0.007	-0.046	0.015	0.141	-0.027	-0.001
0.043	-0.005	0.005	-0.075	0.054	0.017	0.011
-0.068	0.095	-0.059	0.036	0.131	0.045	-0.040
-0.049	0.083	-0.052	0.082	0.084	-0.016	-0.030

Rps10	Rnf8	RGD735065	Ilrun	Rfx6	Col13a1	H2afy2
-0.07	0.01	-0.07	0.01	-0.11	-0.04	-0.03
-0.07	0.05	-0.09	0.11	-0.04	-0.09	0.06
-0.06	0.06	-0.07	0.13	0.00	-0.10	0.08
-0.01	0.05	-0.03	-0.01	-0.08	0.04	-0.01
-0.05	0.01	-0.05	-0.02	-0.14	0.05	-0.05
-0.03	0.07	-0.03	0.09	0.04	-0.17	0.09
0.00	0.07	-0.07	0.12	0.03	-0.02	0.14
0.01	0.04	0.00	0.04	0.14	-0.06	0.05
-0.03	0.01	0.01	-0.01	-0.05	-0.01	0.03
0.03	0.06	-0.06	0.17	0.08	-0.11	0.09
0.00	0.05	-0.08	0.14	0.02	-0.11	0.07

Tspan15	Ppa1	Vps26a	Lmo2	Pdhx	Rcn1	RGD1563222
-0.241	0.109	-0.079	0.151	-0.184	0.203	0.025
-0.166	-0.030	-0.054	0.063	-0.262	0.190	0.006
-0.104	-0.073	-0.024	0.021	-0.246	0.145	-0.005
-0.103	0.094	-0.046	0.068	-0.106	0.091	0.032
-0.160	0.116	-0.051	0.121	-0.057	0.141	0.002
-0.061	-0.023	-0.009	0.055	-0.246	0.051	0.028
-0.048	-0.065	-0.004	-0.055	-0.154	0.002	0.091
-0.021	0.016	0.026	0.055	-0.049	0.028	0.002
-0.043	-0.056	-0.055	-0.043	0.113	0.055	0.018
-0.165	-0.001	-0.016	0.004	-0.222	0.083	0.091
-0.227	0.034	-0.041	0.053	-0.247	0.143	0.084

Kif1bp	Pamr1	RGD1563222	Ccdc73	Caprin1	AABR0706328	Ypel5
-0.04	0.00	-0.04	0.02	0.04	-0.12	-0.03
-0.03	0.05	-0.12	-0.02	0.07	-0.21	-0.17
-0.02	0.05	-0.13	-0.03	0.07	-0.20	-0.20
-0.01	0.03	-0.02	-0.02	0.08	-0.04	0.01
0.02	0.01	-0.03	-0.03	0.05	-0.04	0.02
-0.06	-0.03	-0.07	0.03	0.04	-0.15	-0.10
-0.01	0.00	0.04	-0.03	0.04	-0.16	-0.08
-0.09	0.03	-0.03	-0.02	0.05	-0.09	-0.08
0.01	0.00	-0.01	-0.03	0.03	-0.12	0.05
-0.13	-0.01	-0.04	-0.01	0.09	-0.18	-0.18
-0.12	-0.01	-0.05	-0.01	0.09	-0.20	-0.16

Tcp11l1	Gpn1	Alk	Togaram2	Capn13	Clip4	RGD1304963
0.113	-0.080	-0.025	-0.145	-0.012	-0.114	-0.136
0.232	-0.144	-0.088	-0.224	-0.001	-0.164	-0.149
0.234	-0.134	-0.091	-0.206	-0.002	-0.149	-0.128
0.050	-0.046	-0.002	-0.099	-0.030	-0.092	-0.027
0.007	-0.057	-0.022	-0.068	-0.004	-0.080	-0.006
0.099	-0.126	-0.032	-0.142	-0.039	-0.047	-0.062
0.049	-0.036	-0.107	-0.089	-0.092	-0.057	-0.045
0.082	0.037	-0.043	-0.084	-0.073	0.026	0.001
-0.032	-0.036	-0.020	-0.019	-0.005	-0.023	0.035
0.194	-0.070	-0.019	-0.246	-0.067	-0.062	-0.078
0.200	-0.092	-0.028	-0.258	-0.060	-0.091	-0.113

Rbks	Adcy3	Galnt14	Xdh	Gpn1	B3glct	Lrrc8e
0.09	-0.10	0.07	-0.08	-0.10	0.02	-0.09
0.24	-0.14	0.08	0.04	-0.18	0.13	-0.13
0.24	-0.13	0.06	0.08	-0.17	0.15	-0.11
0.09	-0.11	0.08	-0.01	-0.02	-0.03	-0.01
0.04	-0.07	0.05	-0.07	-0.04	0.01	-0.04
0.09	-0.11	0.04	-0.01	-0.08	0.08	-0.11
0.15	-0.12	0.00	-0.04	-0.11	0.15	-0.05
0.08	-0.01	-0.04	-0.01	-0.01	0.03	0.04
0.09	-0.08	0.01	-0.03	-0.09	0.01	-0.11
0.21	-0.16	0.06	0.07	-0.14	0.10	-0.06
0.22	-0.18	0.08	0.03	-0.16	0.09	-0.09

Ypel5	N4bp2l1	Cd209	Cd209e	B3glct	Hsph1	Kl
0.035	-0.177	-0.017	-0.006	-0.026	0.089	-0.044
-0.037	-0.201	0.064	-0.016	-0.021	0.143	0.066
-0.046	-0.169	0.083	-0.021	-0.020	0.137	0.093
-0.054	-0.147	0.058	0.007	-0.022	0.103	0.014
0.007	-0.091	0.007	0.049	-0.011	0.024	-0.017
-0.082	-0.177	0.071	-0.015	-0.026	0.095	0.054
-0.069	-0.210	-0.039	-0.040	0.032	0.086	-0.032
0.069	-0.008	0.046	-0.046	-0.008	0.068	-0.016
-0.119	-0.002	0.007	0.004	0.086	-0.076	0.039
-0.048	-0.246	0.045	-0.034	-0.003	0.226	0.048
-0.034	-0.268	0.033	-0.028	-0.004	0.219	0.029

Pet100	AABR0703510	Fcer2	Pex11g	Ugt2a3	Sult1d1	Sult1b1
0.09	-0.06	-0.01	-0.03	-0.07	0.13	-0.04
0.06	-0.05	0.01	-0.01	-0.07	0.04	-0.08
0.03	-0.05	0.02	0.01	-0.05	-0.01	-0.08
0.06	-0.03	0.03	-0.04	0.04	0.08	0.01
0.02	0.01	-0.02	-0.05	-0.04	0.03	-0.02
0.01	-0.04	-0.04	-0.02	0.08	0.09	0.04
0.01	0.01	-0.08	-0.05	0.04	0.01	0.05
-0.04	-0.04	0.02	0.05	-0.04	0.03	0.00
0.09	0.09	-0.05	-0.06	0.04	-0.02	0.09
0.08	-0.11	0.00	0.03	-0.03	0.05	-0.03
0.10	-0.11	-0.01	0.01	-0.05	0.09	-0.03

Clec4m	Arhgef18	Retn	Pet100	Cers4	Stard13	Snapc2
-0.043	0.021	0.087	0.035	-0.127	-0.100	-0.019
-0.060	0.078	-0.254	0.080	-0.043	-0.034	0.110
-0.061	0.088	-0.340	0.077	-0.004	0.000	0.140
0.020	-0.002	0.038	0.039	-0.072	-0.087	-0.015
0.025	-0.058	0.187	-0.002	-0.132	-0.097	-0.096
-0.085	0.065	-0.086	0.074	-0.037	0.013	0.026
0.021	0.062	-0.193	0.111	0.080	0.027	0.043
-0.126	0.065	-0.053	0.071	-0.046	-0.043	0.074
0.036	-0.050	0.053	0.057	-0.041	-0.077	0.009
-0.053	0.106	-0.252	0.082	-0.048	-0.085	0.192
-0.056	0.093	-0.178	0.082	-0.081	-0.112	0.154

Ugt2b35	AC114845.1	RGD1559459	Ugt2b37	Sult1e1	Rassf6	Afm
-0.09	-0.07	-0.12	-0.02	-0.05	-0.03	0.29
-0.13	-0.09	-0.03	-0.02	0.02	-0.09	0.17
-0.13	-0.09	0.01	-0.02	0.03	-0.11	0.08
-0.04	-0.02	-0.12	0.04	-0.04	0.01	0.19
0.00	-0.04	-0.17	-0.03	0.00	-0.05	0.23
-0.07	0.02	0.01	0.05	-0.02	0.00	0.00
-0.06	-0.04	0.04	0.05	-0.01	-0.04	-0.02
-0.02	-0.03	0.01	0.00	-0.03	-0.03	0.05
0.07	0.05	-0.05	0.03	0.14	0.08	0.12
-0.18	-0.02	-0.03	0.01	-0.01	-0.02	0.08
-0.17	-0.03	-0.07	0.00	-0.01	-0.02	0.17

Mir6321	Alb	Afp	LOC360919	Sult1d1
0.107	-0.015	0.067	0.001	0.090
-0.007	-0.092	0.106	-0.038	0.058
-0.046	-0.105	0.100	-0.052	0.027
0.019	-0.059	0.007	-0.064	0.050
0.084	-0.063	-0.012	-0.089	0.108
-0.023	-0.089	0.090	-0.073	0.064
0.015	-0.084	0.058	-0.007	-0.018
0.010	-0.136	0.026	-0.062	-0.054
-0.056	0.035	0.083	0.084	0.105
0.025	-0.066	0.112	-0.037	0.000
0.057	-0.060	0.120	-0.027	0.037

Uba6
0.00
-0.06
-0.09
-0.01
0.02
-0.03
-0.02
0.01
0.11
-0.07
-0.05

