



Title	Cloning, expression and characterization of a β -d-xylosidase from <i>Lactobacillus rossiae</i> DSM 15814T
Author(s)	Pontonio, Erica; Mahony, Jennifer; Di Cagno, Raffaella; O'Connell Motherway, Mary; Lugli, Gabriele A.; O'Callaghan, Amy; De Angelis, Maria; Ventura, Marco; Gobbetti, Marco; van Sinderen, Douwe
Publication date	2016-05-03
Original citation	Pontonio, E., Mahony, J., Di Cagno, R., O'Connell Motherway, M., Lugli, G. A., O'Callaghan, A., De Angelis, M., Ventura, M., Gobbetti, M. and van Sinderen, D. (2016) 'Cloning, expression and characterization of a β -d-xylosidase from <i>Lactobacillus rossiae</i> DSM 15814T', <i>Microbial Cell Factories</i> , 15, 72 (12pp). doi: 10.1186/s12934-016-0473-z
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://microbialcellfactories.biomedcentral.com/articles/10.1186/s12934-016-0473-z http://dx.doi.org/10.1186/s12934-016-0473-z Access to the full text of the published version may require a subscription.
Rights	© 2016, Pontonio et al. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated. https://creativecommons.org/licenses/by/4.0/
Item downloaded from	http://hdl.handle.net/10468/4177

Downloaded on 2017-09-05T01:06:33Z

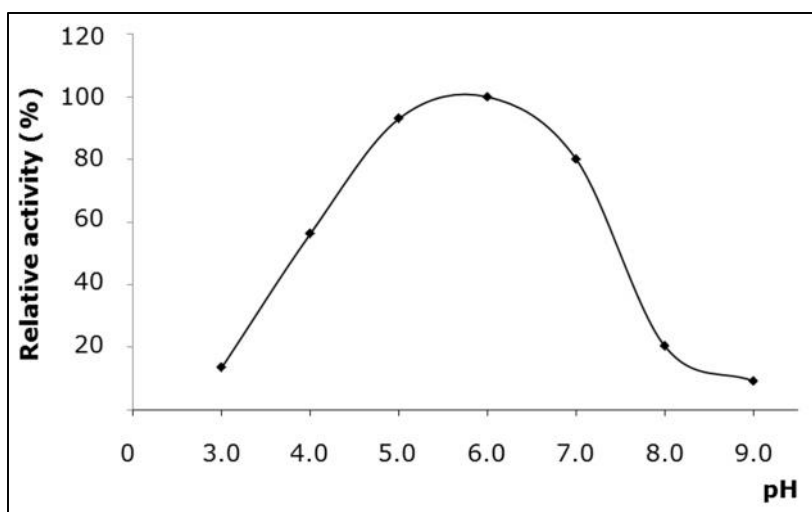


UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Figure S1. Effect of pH (A) and temperature (B) on the β -xylosidase activity of *Lactobacillus rossiae* DSM 15814^T. Effect of pH was determined in Na-acetate (3.0 – 6.0), phosphate (6.0 – 7.0) and Tris-HCl (7.0 – 9.0) buffers, whereas the temperature was assayed in phosphate buffer (pH 6). The U refers to the increase of the absorbance at 410 nm in one minute per mg of protein. Reaction time 10 minutes.

(A)



(B)

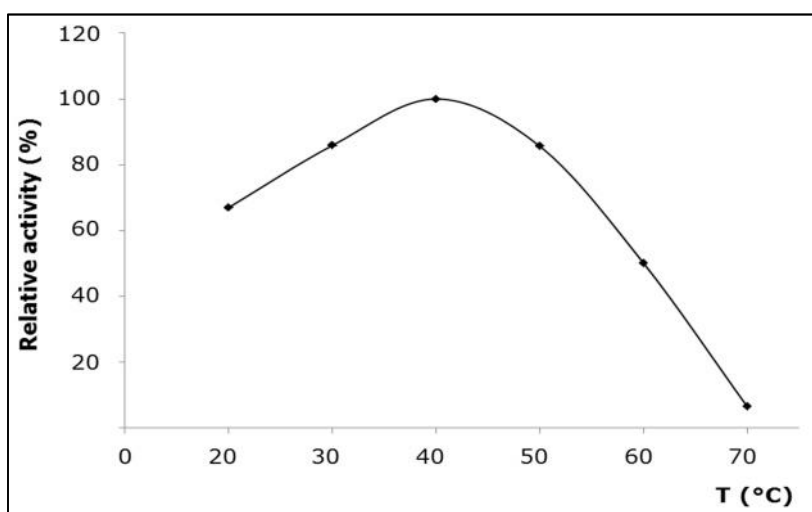


TABLE S1. Gene sequences BLAST alignment

Gene	Function	Accession number	E-value	Identity
<i>xyl</i> cluster				
LROS_1106	Hypothetical protein	121447	0.0	100%
LROS_1107	Aldose 1 epimerase	206431	0.0	100%
<i>xylA</i>	-xylosidase	141219	0.0	99%
<i>xynT</i>	Xyloside transporter	99065	0.0	99%
<i>xylT</i>	D-xylose proton symporter	19897	3e-173	100%
<i>xylI</i>	Xylose isomerase	229077	0.0	100%
<i>xylK</i>	Xylulose kinase	25965	0.0	99%
<i>xylR</i>	Transcriptional regulator	190937	0.0	99%
<i>ara</i> cluster				
<i>araA</i>	L-arabinose isomerase	167475	0.0	100%
<i>araB</i>	Ribulokinase	240627	0.0	100%
<i>araD</i>	L-ribulose-5-phosphate-4-epimerase	53991	0.0	100%
<i>araR</i>	Transcriptional repressor 2C GnT family	116651	0.0	99%
<i>araRS</i>	Transcriptional regulator ArsR family	60305	0.0	99%