

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0319	add this product to cart
LOT:	2011-0319-1	view other β-xylosidases
Activity:	β -Xylosidase	
Synonyms:	Xylan 1,4- β -xylosidase; xylobiase; exo-1,4- β -xylosidase; β -D-xylopyranosidase; exo-1,4-xylosidase; exo-1,4- β -D-xylosidase; 1,4- β -D-xylan xylohydrolase; 4- β -D-xylan xylohydrolase; xylan 1,4-beta-xylosidase; exo-1,4-beta-xylosidase; beta-D-xylopyranosidase; exo-1,4-beta-D-xylosidase; 1,4-beta-D-xylan xylohydrolase; 4-beta-D-xylan xylohydrolase	
Nomenclature:	CAZy [GH52, glycoside hydrolase family 52]	
Source organism:	<i>Opitutus terrae</i> PB90-1	
Enzyme Commission No.:	3.2.1.37	
Activity:	171.46 U/mL	} (35°C; pH 6.5; 5 mM oNP- β -D-xylopyranoside)
Specific activity:	31.35 U/mg	
Purity:	> 95 % as judged by SDS-PAGE	
Form and storage:	Supplied in 3.2 M ammonium sulphate, store at 4°C (shipped at room temperature)	
pH optimum:	6.5	
Temperature optimum:	> 35°C	
[Protein]:	5.47 mg/mL	
Sequence length:	691 amino acids (view sequence)	
Accession No.:	B1ZP95, YP_001821184, ACB77584	
Molecular weight:	81101.4 Da	(theoretical)
	~ 80000 Da	(observed by SDS-PAGE)
	-	(observed by mass spectrometry)
Biological function:	Catalyses the hydrolysis of (1→4)- β -D-xylans, to remove successive D-xylose residues from the non-reducing termini	
Potential application(s):	Biomass conversion , carbohydrate research	
Comments:	This enzyme also hydrolyses xylobiose and xylooligosaccharides	
Usage:	Agitate vial sufficiently to fully homogenise enzyme precipitate before use	

Assay:

One unit is defined as the amount of enzyme required to release 1 μmol of oNP per minute from oNP- β -D-xylopyranoside (5 mM) in 50 mM sodium phosphate buffer, pH 6.5, at 35°C, and using an extinction coefficient of 18000 $\text{M}^{-1} \text{cm}^{-1}$

Primary sequence:

MAQESYHTQHAPFGAFASFTVGLVDSQGGFGQSLGVPARQNVYVGFERSAQHARWQMLPFLNPPVAAETAFT
TAEDTVPRPPGGFDALRPAAYQRTLNWASDTWRADESRLFSLTLPFDHVADPAKMKKSAARFQLAPAI
GWIEYDNRAGTEPVELMFGIGDPSRPLRPLSEADPKLVGFAGGTGWGYATAPTRGIELRQGFDFVAPKFR
DYHGLLVIAAETALVFSVPAGRRKRFPPLVLGFYAAGTQTGLPASAYAYTRVFDDLEDVLKHGLEHFDRYA
AIAATRDRSRLNPDQRFLLAQSTHSYYGSTQLLWDKRGPLWVNEGEYRMINTFDLTVDHVFFELA
WHPWAVRDVLDLFRVRSYRDRHGLAFTHDMGVMNHFTMPGRSSYECDHLTGCFSHMTMEQLLNWVLTAV
TYASHTEDRRWLKTNLKTLLACAESLHVRDDADPKKRDGILKRDSDRCGADGSEITTYDSLVDVSLGQARN
NLYLAVKTLGAWVLLERAFGALGQAKAAGDARATADRLAQSITQKFEHDTGFFPAVFEKGNRSRILPAVE
GFIYPLYLGYTDATNRTGRFAPLFRQLGQHMAQALQPGICLDAKSGGWKMSSTSTNTWFSKIAIAQHVVR
QLFPEVMNDAARAGDRVHADWQRTPGCGRDAMCDQIRSDSGVACGSRYYPGRGVSCYLWLSE

Literature:

-