

Recombinant Enzyme Product Specification Sheet

Cat. No.:	PRO-E0062
LOT:	2008-0062
Activity:	β -Xylanase
Synonyms:	Endo-(1 \rightarrow 4)- β -xylan 4-xylanohydrolase; endo-1,4-xylanase; xylanase; β -1,4-xylanase; endo-1,4-xylanase; endo- β -1,4-xylanase; endo-1,4- β -D-xylanase; 1,4- β -xylan xylanohydrolase; β -xylanase; β -1,4-xylan xylanohydrolase; endo-1,4- β -xylanase; β -D-xylanase; 4- β -D-xylan xylanohydrolase
Nomenclature:	NpXyn11A, XynA, XylA, GH11, GH 11, belongs to glycoside hydrolase family 11 (member of clan GH-C)
Source organism:	<i>Neocallimastix patriciarum</i>
Enzyme Commission No.:	3.2.1.8
Activity:	<div style="border: 1px solid black; padding: 5px;">NOTE: this product has been produced and is awaiting assay. It is thus currently available for purchase by the mg only. If you have a query, please contact us (technical@prozomix.com)</div>
Specific activity:	
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:	-
Temperature optimum:	-
[Protein]:	10 mg/mL
Sequence length:	226 amino acids (view sequence)
Accession No.:	CAA46498 , P29127
Molecular weight:	25981.7 Da (theoretical) ~ 250000 Da (observed by SDS-PAGE) - (observed by mass spectrometry)
Biological function:	Hydrolysis of β -1,4-xylans
Potential application(s):	Biomass conversion , carbohydrate research
Comments:	This truncated enzyme is the C-terminal catalytic module from the native enzyme (residues 275-499). The native enzyme displays unusually high catalytic activity and is one of the few fungal GH11 proteins not inhibited by the wheat protein XIP-I. A notable feature

revealed by X-ray crystallographic analyses is a relatively extended binding cleft for GH11 enzymes comprising potentially 6 subsites running from -3 and +3. PDB: [2C1F](#), [2VG9](#)

Usage: Agitate bottle sufficiently to fully homogenise enzyme precipitate before use

Assay: -

Primary sequence:

MKFTVGNQNGQNHKGVNDGFSYEIWLNDNTGGNGSMTLGSGATFKAEWNAAVNRGNFLARRGLDFGSQKKATDYDYI
GLDYAATYKQTASASGNSRLCVYGWVFQNRGLNGVPLVEYYI IEDWVDWVPDAQGKMVTIDGAQYKIFQMDHTGPT
INGGSETFKQYFSVRQQKRTSGHITVSDHFKEWAKQGWGIGNLYEVALNAEGWQSSGVADVTLTLDVYTTTPKGSSP
A

Literature: 1. [Vardakou et al. \(2008\) J. Mol. Biol. 375, 1293-1305](#)