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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

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## **Recombinant Enzyme Product Specification Sheet**

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**LOT:** 2012-0062-1

**Activity:**  $\beta$ -Xylanase

**Synonyms:** Endo- $(1\rightarrow 4)$ - $\beta$ -xylan 4-xylanohydrolase; endo-1,4-xylanase;

xylanase;  $\beta$ -1,4-xylanase; endo-1,4-xylanase; endo- $\beta$ -1,4-xylanase; endo-1,4- $\beta$ -D-xylanase; 1,4- $\beta$ -xylan xylanohydrolase;  $\beta$ -D-xylanase; 4- $\beta$ -

D-xylan xylanohydrolase

Nomenclature: NpXyn11A, XynA, XylA, GH11, GH 11, belongs to glycoside

hydrolase family 11 (member of clan GH-C)

Source organism: Neocallimastix patriciarum

Enzyme Commission No.: 3.2.1.8

Activity: -

Specific activity: - \_ \_ query, please contact us (technical@prozomix.com)

**Form and storage:** Supplied in 3.2 M ammonium sulphate, store at 4°C (shipped at room

> 95 % as judged by SDS-PAGE

temperature)

pH optimum: -

**Purity:** 

Temperature optimum: -

[Protein]: 8.472 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  $\beta$ -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



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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:**

MKFTVGNGQNQHKGVNDGFSYEIWLDNTGGNGSMTLGSGATFKAEWNAAVNRGNFLARRGLDFGSQKKATDYDYI GLDYAATYKQTASASGNSRLCVYGWFQNRGLNGVPLVEYYIIEDWVDWVPDAQGKMVTIDGAQYKIFQMDHTGPT INGGSETFKQYFSVRQQKRTSGHITVSDHFKEWAKQGWGIGNLYEVALNAEGWQSSGVADVTLLDVYTTPKGSSP A

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