

CZ0206\_UG\_EN\_V2302

## Xylosidase 43A, Cellvibrio japonicus

# *Cj*Xyl43A (GH43)

| Catalogue number |  |
|------------------|--|
| CZ02061          |  |
| CZ02062          |  |

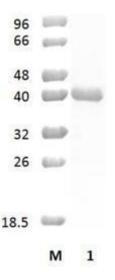
Presentation 1 mg 3 x 1 mg

#### Description

Xylosidase 43A (*Cj*Xyl43A), assigned the E.C. number 3.2.1.37, is a derivative of *Cellvibrio japonicus*. It is an exo-1,4- $\beta$ -xylosidase. The recombinant *Cj*Xyl43A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 43 (GH43) enzyme (see more details at <u>www.cazy.org</u>). The protein is supplied in a solution containing 35 mM NaHepes buffer (pH 7.5), 750 mM NaCl, 200 mM Imidazole, 3.5 mM CaCl<sub>2</sub>, and 25% (v/v) glycerol, at a concentration of 1 mg/mL. Bulk quantities of this product can be made available upon request. To place an order, simply visit our website. We offer fast and secure shipping worldwide.

#### **Electrophoretic Purity**

The molecular integrity and purity of *Cj*Xyl43A (GH43) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Cj*Xyl43A (GH43) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 39,97 kDa. Lane M contains a Protein Marker for reference.

#### Storage temperature

The protein should be stored at -30°C to -15°C in a constant temperature freezer. The protein will remain stable till the expiry date if stored as specified.

#### Substrate specificity

CjXyl43A (GH43) hydrolyses sugar beet arabinan in an exo-fashion and 4-nitrophenyl-L-arabinofuranoside (4NPA).

#### Temperature and pH optima

The pH optimum for enzymatic activity is 7 while temperature optimum is 25 °C.

### **Enzyme activity**

The substrate specificity and kinetic properties of *Cj*Xyl43A (GH43) are detailed in the referenced publication provided below. To perform enzyme assays and determine specific activity values, adhere to the methodology outlined in the cited paper(s).

#### Reference

DeBoy et al. (2008) J Bacteriol. 190(15):5455-63.

Cartmell et al. (2011) J Biol Chem. 286(17):15483-95.

#### **Customer Support**

Our dedicated customer support team is always ready to assist you with any questions or technical issues you may have. Reach us via email at info@nzytech.com.

#### **Quality control assay**

Protein purity is determined to be ≥90%, as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

For life science research only. Not for use in diagnostic procedures.

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