

CZ0789\_UG\_EN\_V2302

# Xylosidase 39A, Clostridium stercorarium

# CsXyl39A (GH39)

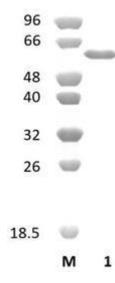
Catalogue numberPresentationCZ078910.25 mgCZ078923 x 0.25 mg

#### **Description**

Xylosidase 39A (*Cs*Xyl39A), assigned the E.C. number 3.2.1.37, is a derivative of *Clostridium stercorarium*. It is an exo-1,4-β-xylosidase. The recombinant *Cs*Xyl39A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 39 (GH39) enzyme (see more details at <a href="https://www.cazy.org">www.cazy.org</a>). 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 0.25 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 CsXyl39A (GH39) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Cs*Xyl39A (GH39) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 60,27 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**

CsXyl39A (GH39) hydrolyses pNP- $\beta$ -xyloside, pNP- $\alpha$ -mannoside and xylobiose.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 5.5-6.5 and at a temperature of 60°C. Maximal enzymatic activity is achieved at pH 6 and a consistent temperature of 60°C.

# **Enzyme activity**

The substrate specificity and kinetic properties of CsXyl39A (GH39) 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

Adelsberger et al. (2004) Microbiology. 150(Pt 7):2257-66.

# **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 ≥75%, as assessed by SDS-PAGE and subsequent BlueSafe staining (MB15201).

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