

CZ0888\_UG\_EN\_V2302

# Xyloglucanase 74A, Clostridium cellulolyticum

# CcXgh74A (GH74-doc-doc)

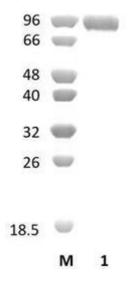
Catalogue number	Presentation
CZ08881	0.5 mg
CZ08882	3 x 0.5 mg

# Description

Xyloglucanase 74A (*Cc*Xgh74A), assigned the E.C. number 3.2.1.151, is a derivative of *Clostridium cellulolyticum*. It is a xyloglucan endo-1,4-β-glucanase. The recombinant *Cc*Xgh74A, purified from *Escherichia coli*, is a modular Glycoside Hydrolase family 74 (GH74-doc-doc) 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 0.5 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 *Cc*Xgh74A (GH74-doc-doc) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Cc*Xgh74A (GH74-doc-doc) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 93,37 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

CcXgh74A (GH74-doc-doc) hydrolyses PASC, avicel, xyloglucan and CMC.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 6 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Cc*Xgh74A (GH74-doc-doc) 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

Ravachol et al. (2016) Sci Rep. 6:22770.

# **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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