

CZ0916\_UG\_EN\_V2302

# Glucuronoxylanase 30A, Clostridium clariflavum

# CcXyn30A (GH30)

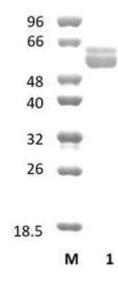
Catalogue numberPresentationCZ091610.5 mgCZ091623 x 0.5 mg

# **Description**

Glucuronoxylanase 30A (CCXyn30A), assigned the E.C. number 3.2.1.136, is a derivative of  $Clostridium\ clariflavum$ . It is a glucuronoarabinoxylan endo-1,4- $\beta$ -xylanase. The recombinant CcXyn30A, purified from  $Escherichia\ coli$ , is a single-domain Glycoside Hydrolase family 30 (GH30) 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  $CaCl_2$ , 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 CcXyn30A (GH30) 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*Xyn30A (GH30) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 57,78 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**

CcXyn30A (GH30) hydrolyses glucuronoxylans.

# 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*Xyn30A (GH30) 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

Artzi et al. (2014) Biotechnol Biofuels. 7: 100.

Artzi et al. (2015) MBio. 6(3):e00411-15.

Šuchová et al. (2021) Appl Microbiol Biotechnol. 105(1):185-195.

Crooks et al. (2021) Front Mol Biosci. 8:714238.

# **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.