

CZ0716\_UG\_EN\_V2302

# Xylanase 10B, Bacteroides ovatus

# **Bo**Xyn10B (GH10-CBM22-GH10)

 Catalogue number
 Presentation

 CZ07161
 0.25 mg

 CZ07162
 3 x 0.25 mg

### **Description**

Xylanase 10B (BoXyn10B), assigned the E.C. number 3.2.1.8, is a derivative of Bacteroides ovatus. It is an endo-1,4-β-xylanase that contains an extended substrate binding cleft that requires a high degree of occupancy for catalysis to occur. The recombinant BoXyn10B, purified from Escherichia coli, is a modular Glycoside Hydrolase family 10 (GH10-CBM22-GH10) enzyme (see more details at www.cazy.org). 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 *Bo*Xyn10B (GH10-CBM22-GH10) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

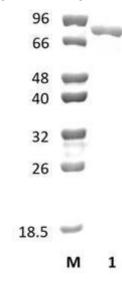


Figure 1. SDS-PAGE analysis of BoXyn10B (GH10-CBM22-GH10) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 81,82 kDa. Lane M contains a Protein Marker for reference.

#### 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**

BoXyn10B (GH10-CBM22-GH10) hydrolyses xylans.

## Temperature and pH optima

The pH optimum for enzymatic activity is 7.2 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Bo*Xyn10B (GH10-CBM22-GH10) 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

Rogowski et al. (2015) Nat Commun. 6:7481.

# **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.