

CZ0196 UG EN V2302

# α-Galactosidase 97B, Bacteroides thetaiotaomicron

# **BtGal97B (GH97)**

Catalogue number Presentation

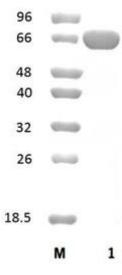
CZ01961 1 mg CZ01962 3 x 1 mg

### Description

 $\alpha$ -Galactosidase 97B (BtGal97B), assigned the E.C. number 3.2.1.22, is a derivative of *Bacteroides thetaiotaomicron*. It is an  $\alpha$ -galactosidase. The recombinant BtGal97B, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 97 (GH97) 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 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 *Bt*Gal97B (GH97) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Bt*Gal97B (GH97) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 74,96 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**

BtGal97B (GH97) hydrolyses  $\alpha$ -galactosyl linkages of fungal  $\alpha$ -mannans such as the yeast Schizosaccharomyces pombe.

# Temperature and pH optima

The pH optimum for enzymatic activity is 7 while temperature optimum is 37 °C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Bt*Gal97B (GH97) 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

Cuskin et al. (2015) Nature 517, 165-169.

Mahowald et al. (2009) Proc Natl Acad Sci U S A. 106(14):5859-5864.

## **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.