

CZ0511\_UG\_EN\_V2302

## Fucosidase 95A, Bifidobacterium longum

# **BIFuc95A (GH95)**

Catalogue number Presentation

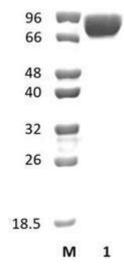
CZ05111 1 mg CZ05112 3 x 1 mg

#### **Description**

Fucosidase 95A (B/Fuc95A), assigned the E.C. number 3.2.1.51, is a derivative of  $Bifidobacterium \, longum$ . It is an  $\alpha$ -L-fucosidase. The recombinant B/Fuc95A, purified from  $Escherichia \, coli$ , is a single-domain Glycoside Hydrolase family 95 (GH95) enzyme (see more details at  $\underline{www.cazy.org}$ ). 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 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 *BI*Fuc95A (GH95) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *BI*Fuc95A (GH95) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 88,2 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**

BIFuc95A (GH95) hydrolyses 1,2-  $\alpha$  linkages and 1,3-  $\alpha$  linkages of fucose carbohydrates.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 6.0-7.5 and at a temperature of 37°C. Maximal enzymatic activity is achieved at pH 7.5 and a consistent temperature of 37°C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *BI*Fuc95A (GH95) 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

Sela et al. (2012) Appl Environ Microbiol. 78(3):795-803.

## **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.