

CZ0138\_UG\_EN\_V2302

# Arabinofuranosidase 43C, Bacteroides thetaiotaomicron

# BtAbf43C (GH43)

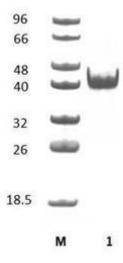
Catalogue numberPresentationCZ013810.25 mgCZ013823 x 0.25 mg

#### **Description**

Arabinofuranosidase 43C (*Bt*Abf43C), assigned the E.C. number 3.2.1.55, is a derivative of *Bacteroides thetaiotaomicron*. It is an exo-α-arabinofuranosidase. The recombinant *Bt*Abf43C, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 43 (GH43) enzyme (see more details at <a href="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 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 *Bt*Abf43C (GH43) 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*Abf43C (GH43) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 40,45 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**

BtAbf43C (GH43) hydrolyses arabinan.

#### 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*Abf43C (GH43) 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

Cartmell et al. (2011) J Biol Chem. 286(17):15483-15495.

# **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.