

# Unsaturated rhamnogalacturonyl hydrolase 105B, *Bacteroides thetaiotaomicron*

## BtUrh105B (GH105)

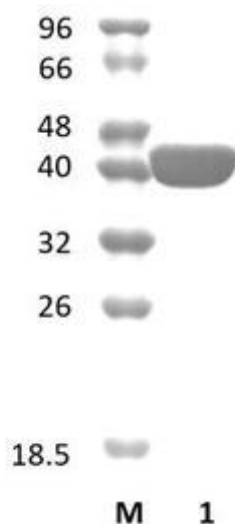
Catalogue number	Presentation
CZ07241	1 mg
CZ07242	3 x 1 mg

### Description

Unsaturated rhamnogalacturonyl hydrolase 105B (BtUrh105B), assigned the E.C. number 3.2.1.172, is a derivative of *Bacteroides thetaiotaomicron*. It catalyzes the hydrolysis of unsaturated rhamnogalacturonan disaccharide to yield unsaturated D-galacturonic acid and L-rhamnose. The recombinant BtUrh105B, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 105 (GH105) enzyme (see more details at [www.cazy.org](http://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 BtUrh105B (GH105) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1.** SDS-PAGE analysis of BtUrh105B (GH105) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 43,48 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

BtUrh105B (GH105) hydrolyses  $\Delta$ -4,5-unsaturated rhamnogalacturonan disaccharide.

## 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 *BtUrh105B* (GH105) 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

Munoz-Munoz *et al.* (2017) J Biol Chem. 292(32):13271-13283.

## 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](mailto: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.

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