

CZ0939 UG EN V2302

# Δ-4,5-Unsaturated β-glucuronyl hydrolase 105A, Nonlabens ulvanivorans

# NuUgl105A (GH105)

Catalogue number Presentation

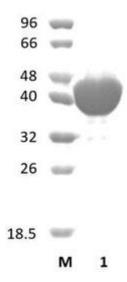
CZ09391 1 mg CZ09392 3 x 1 mg

#### **Description**

 $\Delta$ -4,5-Unsaturated  $\beta$ -glucuronyl hydrolase 105A (NuUgl105A), assigned the E.C. number 3.2.1.-, is a derivative of *Nonlabens ulvanivorans*. It is an  $\Delta$ -4,5-unsaturated  $\beta$ -glucuronyl hydrolase. The recombinant NuUgl105A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 105 (GH105) 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 *Nu*Ugl105A (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 *Nu*Ugl105A (GH105) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 44,12 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**

NuUgl105A (GH105) hydrolyses oligosaccharides with an unsaturated  $\beta$ -glucuronyl residue located at the nonreducing end.

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 6.5-9.0 and at a temperature of 20-55°C. Maximal enzymatic activity is achieved at pH 7.7 and a consistent temperature of 40°C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *Nu*Ugl105A (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

Collén et al. (2014) J Biol Chem. 289(9):6199-211.

# **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.