

CZ0869\_UG\_EN\_V2302

# β-Glucuronidase 2A, Ruminococcus gnavus

# RgGus2A (GH2)

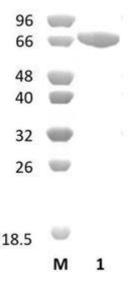
Catalogue number	Presentation
CZ08691	1 mg
CZ08692	3 x 1 mg

#### Description

 $\beta$ -Glucuronidase 2A (*Rg*Gus2A), assigned the E.C. number 3.2.1.31, is a derivative of *Ruminococcus gnavus*. It is a  $\beta$ -glucuronidase. The recombinant *Rg*Gus2A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 2 (GH2) enzyme (see more details at <u>www.cazy.org</u>). 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 *Rg*Gus2A (GH2) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Rg*Gus2A (GH2) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 71,92 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

RgGus2A (GH2) hydrolyses natural  $\beta$ -D-glucuronoside and the artificial substrate 4-nitrophenyl- $\beta$ -D-glucuronide (PNPG).

#### Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 6.5-7.5 and at a temperature of 37°C. Maximal enzymatic activity is achieved at pH 6.8 and a consistent temperature of 37°C.

## **Enzyme activity**

The substrate specificity and kinetic properties of *Rg*Gus2A (GH2) 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

Beaud et al. (2005) Microbiology. 151(Pt 7):2323-30.

#### **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.

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