CZ0749_UG_EN_V2302

# β-Agarase 16B, *Zobellia galactanivorans*

# *Zg*Aga16B (GH16)

| Catalogue number | Presentation |
|---|---|
| CZ07491 | 1 mg |
| CZ07492 | 3 x 1 mg |

## Description

β-Agarase 16B (*Zg*Aga16B), assigned the E.C. number 3.2.1.81, is a derivative of *Zobellia galactanivorans*. It is an enzyme that participates in the hydrolysis of 1,4-β-galactosidic linkages in agarose. The recombinant *Zg*Aga16B, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 16 (GH16) enzyme (see more details at 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 $CaCl_2$, 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 *Zg*Aga16B (GH16) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

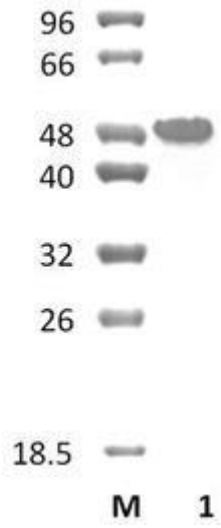


**Figure 1**. SDS-PAGE analysis of *Zg*Aga16B (GH16) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 40,51 kDa. Lane M contains a Protein Marker for reference.

## 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

*Zg*Aga16B (GH16) hydrolyses agarose.

## Temperature and pH optima

The pH optimum for enzymatic activity is 7 while temperature optimum is 44 °C.

## Enzyme activity

The substrate specificity and kinetic properties of *Zg*Aga16B (GH16) 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

Jam *et al.* (2005) Biochem J. 385(Pt 3):703-13.

Hehemann *et al.* (2012) J Biol Chem. 287(36):30571-84.

## 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).