

CZ0395 UG EN V2302

# β-Porphyranase 16A, Zobellia galactanivorans

# ZgPor16A (GH16)

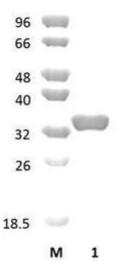
Catalogue number	Presentation
CZ03951	1 mg
CZ03952	3 x 1 mg

# Description

 $\beta$ -Porphyranase 16A (*Zg*Por16A), assigned the E.C. number 3.2.1.178, is a derivative of *Zobellia galactanivorans*. It is an enzyme that participates in the hydrolysis of  $\beta$ -galactopyranose-1,4- $\alpha$ -galactopyranose-6-sulfate linkages in porphyran. The recombinant *Zg*Por16A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 16 (GH16) 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 ZgPor16A (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 ZgPor16A (GH16) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 33,36 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

ZgPor16A (GH16) hydrolyses porphyran.

#### Temperature and pH optima

The pH optimum for enzymatic activity is 7.5 while temperature optimum is 30 °C.

## **Enzyme activity**

The substrate specificity and kinetic properties of ZgPor16A (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

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

Hehemann et al. (2010) Acta Crystallogr Sect F Struct Biol Cryst Commun. 66(Pt 4):413-7.

#### **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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