

CZ0893 UG EN V2302

# β-Acetylglucosaminidase 18B, Elizabethkingia meningoseptica

# **Em**Acp18B (GH18)

Catalogue number Presentation

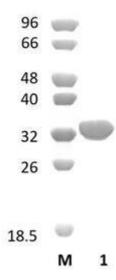
CZ08931 1 mg CZ08932 3 x 1 mg

# **Description**

β-Acetylglucosaminidase 18B (*Em*Acp18B), assigned the E.C. number 3.2.1.96, is a derivative of *Elizabethkingia meningoseptica*. It is an enzyme that participates in the endohydrolysis of the diacetylchitobiosyl unit in high-mannose glycopeptides and glycoproteins containing the (Man(GlcNAc)(2))Asn-structure: one N-acetyl-D-glucosamine residue remains attached to the protein, the rest of the oligosaccharide is released intact. The recombinant *Em*Acp18B, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 18 (GH18) 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 *Em*Acp18B (GH18) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).



**Figure 1**. SDS-PAGE analysis of *Em*Acp18B (GH18) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 33,78 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**

EmAcp18B (GH18) hydrolyses N-linked glycans in glycoproteins.

# Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 7.0-8.0 and at a temperature of 35°C. Maximal enzymatic activity is achieved at pH 7.5 and a consistent temperature of 35°C.

# **Enzyme activity**

The substrate specificity and kinetic properties of *Em*Acp18B (GH18) 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

Van Roey et al. (1994) Biochemistry. 33(47):13989-96.

Tarentino et al. (1992) J Biol Chem. 267(6):3868-72.

# **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.