

## $\beta$ -Acetylglucosaminidase 18B, *Streptomyces plicatus*

### SpAcp18B (GH18)

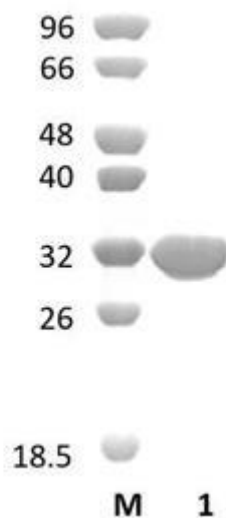
Catalogue number	Presentation
CZ08911	1 mg
CZ08912	3 x 1 mg

#### Description

$\beta$ -Acetylglucosaminidase 18B (*SpAcp18B*), assigned the E.C. number 3.2.1.96, is a derivative of *Streptomyces plicatus*. 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 *SpAcp18B*, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 18 (GH18) enzyme (see more details at [www.cazy.org](http://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<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 *SpAcp18B* (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 *SpAcp18B* (GH18) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 31,13 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

*SpAcp18B* (GH18) hydrolyses N-linked glycans in glycoproteins.

## Temperature and pH optima

The enzyme exhibits optimal activity within a pH range of 5.0-6.0 and at a temperature of 42°C. Maximal enzymatic activity is achieved at pH 5.5 and a consistent temperature of 42°C.

## Enzyme activity

The substrate specificity and kinetic properties of *SpAcp18B* (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

Trumbly *et al.* (1985) *J Biol Chem.* 260(9):5683-90.

Rao *et al.* (1999) *Protein Science* 8:2338–2346.

## 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](mailto: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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