

β -Acetylglucosaminidase 18A, *Capnocytophaga canimorsus*

CcAcp18A (GH18)

Catalogue number	Presentation
CZ08281	0.25 mg
CZ08282	3 x 0.25 mg

Description

β -Acetylglucosaminidase 18A (CcAcp18A), assigned the E.C. number 3.2.1.96, is a derivative of *Capnocytophaga canimorsus*. 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 CcAcp18A, purified from *Escherichia coli*, is a single-domain Glycoside Hydrolase family 18 (GH18) 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 CaCl₂, and 25% (v/v) glycerol, at a concentration of 0.25 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 CcAcp18A (GH18) were evaluated using sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE), followed by BlueSafe staining (MB15201) (Figure 1).

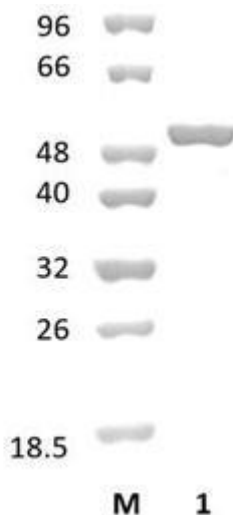


Figure 1. SDS-PAGE analysis of CcAcp18A (GH18) was conducted in (Lane 1), employing a 14% polyacrylamide gel. The enzyme exhibits a band corresponding to a molecular weight of approximately 51,72 kDa. Lane M contains a Protein Marker for reference.

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

CcAcp18A (GH18) hydrolyses the N-linked oligosaccharide after the first N-linked GlcNAc residue.

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 7 and a consistent temperature of 37°C.

Enzyme activity

The substrate specificity and kinetic properties of CcAcp18A (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

Renzi *et al.* (2011) PLoS Pathog. 7(6):e1002118.

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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