Creative Enzymes®

PNGase F from Elizabethkingia meningoseptica, Recombinant

Cat. No. NATE-0604

Lot. No. (See product label)

Introduction

Description In enzymology, a peptide-N4-(N-acetyl-beta-glucosaminyl) asparagine amidase (EC 3.5.1.52) is an enzyme that catalyzes a chemical reaction that cleaves a N4-(acetyl-beta-D-glucosaminyl)asparagine residue in which the glucosamine residue may be further glycosylated, to yield a (substituted) N-acetyl-beta-D-glucosaminylamine and a peptide containing an aspartate residue. This enzyme belongs to the family of hydrolases, specifically those acting on carbon-nitrogen bonds other than peptide bonds in linear amides.

Applications Highly purified material can be used for preparative deglycosylation or for analytical applications in gel, in solution, or on blot membranes. The enzyme can be removed from preparative operations by utilizing its C-teminal 6x histidine fusion tag. Used to deglycosylate protein.

Synonyms glycopeptide N-glycosidase; glycopeptidase; N-oligosaccharide glycopeptidase; N-glycanase; glycopeptidase; Jack-bean glycopeptidase; PNGase A; PNGase F; glycopeptide N-glycosidase; peptide-N4-(N-acetyl-β-glucosaminyl)asparagine amidase; EC 3.5.1.52; PNGase F; 83534-39-8

Product Information

Species Elizabethkingia meningoseptica

Source E. coli

Form Type I, lyophilized powder; Type II, buffered aqueous solution, Supplied as 300 Units/mL enzyme in 50% (v/v) glycerol and 50% (v/v) 20 mM Potassium Phosphate, pH 7.5. Type III, buffered aqueous solution, Supplied as a solution in 20 mM Tris HCl, pH 7.5, 50 mM NaCl and 1 mM EDTA.

EC Number EC 3.5.1.52

CAS No. 83534-39-8

Molecular Weight mol wt ~36 kDa

Unit Definition One unit will catalyze the release of N-linked oligosaccharides from 1 nanomole of denatured ribonuclease B in one minute at 37°C at pH 7.5 monitored by SDS-PAGE. One Creative Enzymes unit of PNGase F activity is equal to 1 IUB milliunit.

Usage and Packaging

Package PNGase F was used for deglycosylation of P-glycoprotein in a study to investigate the dual impact of statins on p-glycoprotein and its effect on doxorubicin cytotoxicity in human neuroblastoma cells. It was used to treat a purified protein, mouse cone ultraviolet (MUV) pigment, before use in quantitative immunoblot analysis in a study It is used to deglycosylate N-linked glycoproteins. Highly purified material can be used for preparative deglycosylation or for analytical applications in gel, in solution, or on blot membranes. The enzyme can be removed from preparative operations by utilizing its C-teminal 6x histidine fusion tag.

Storage and Shipping Information

Storage 2-8°C