

# Recombinant Elizabethkingia miricola PNGase F

**Cat. No.** PNGase F-018E    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	PNGase F is a recombinant glycosidase cloned from Elizabethkingia miricola and expressed in E. coli. The enzyme is supplied glycerol-free (for optimal performance in HPLC-intensive methods) along with Reaction Buffer, Denaturation Solution and NP-40 Solution for efficient de-glycosylation.
<b>Species</b>	Elizabethkingia miricola
<b>Source</b>	E. coli
<b>Description</b>	Peptide N-glycosidase F (PNGase F) is suitable for the release of N-linked glycans in solution and from immobilized samples. The enzyme cleaves between the innermost GlcNAc of the oligosaccharide moiety at its attachment point to the asparagine residue on the protein and subsequently converts the asparagine into aspartic acid. Released glycans with free reducing terminus can be labelled using LudgerTag labelling technology for fluorescence and high MS sensitivity detection.
<b>EC</b>	3.5.1.52
<b>Specificity</b>	PNGase F is suitable for release of all types (high-mannose, hybrid and complex) N-glycans from glycoproteins and glycopeptides. Xaa-Asn-Xaa sequence is the minimal peptide substrate for this enzyme. Note that some non-mammalian glycans from sources such as plants, insects and parasites carrying $\alpha$ 1-3 linked core fucose will not be cleaved with PNGase F. For these samples PNGase A can be used.
<b>Contents</b>	PNGase F (Elizabethkingia miricola) supplied in 50 mM NaCl 5 mM EDTA 20 mM

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Tris-HCl pH 7.5-1 vial of 0.15mL 10X Reaction Buffer 500 mM sodium phosphate (pH 7.5 at 1X dilution)-1 vial of 1.0 mL 10X Denaturation Solution 5% SDS 400 mM DTT-1 vial of 1.0 mL NP-40 10% solution-1 vial of 1.0 mL

**Suggested usage**

Denaturing reaction conditions: 1. Make up sample volume to 9  $\mu$ L with ultrapure water. 2. Add 1  $\mu$ L of 10 $\times$  Denaturation Solution to each glycoprotein sample. Close the reaction vials, vortex thoroughly and briefly centrifuge to ensure the samples are completely dissolved. 3. Incubate the samples at 100 centigrade for 10 minutes. 4. Add 2  $\mu$ L of 10 $\times$  Reaction Buffer to each glycoprotein sample. 5. Add 2  $\mu$ L of 10% NP-40 solution. 6. Adjust the reaction volume to 20  $\mu$ L by adding 6  $\mu$ L of water. 7. Add 1  $\mu$ L of PNGase F. Close the reaction vials, mix gently and briefly centrifuge. 8. Incubate the samples at 37 centigrade for 1h.

**Heat Inactivation**

PNGase F is inactivated after 10 minutes at 75 centigrade.

**Applications**

Peptide N-glycosidase F (PNGase F) is suitable for release of N-linked glycans in solution, and from immobilized samples. The enzyme cleaves between the innermost GlcNAc of the oligosaccharide moiety at its attachment point to the asparagine residue on the protein and subsequently converts the asparagine into aspartic acid. Released glycans with free reducing terminus can be labelled using LudgerTag labelling technology for fluorescence and high MS sensitivity detection.

**Storage**

Store at 4 centigrade. Protect from sources of heat and light

**GENE INFORMATION****Synonyms**

glycopeptidase; glycopeptide N-glycosidase; N-glycanase; N-oligosaccharide glycopeptidase

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