

## Product Specification Sheet

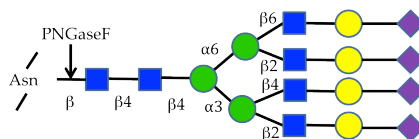
**Product Name:** PNGase F (EC 3.5.1.52)

**Catalog Number:** FSB0002

**Lot Number:** 031113

### Description

PNGase F, peptide N-glycosidase F, is a recombinantly expressed endoglycosidase derived from *Flavobacterium meningosepticum* that cleaves the  $\beta$ -aspartylglucosamine bond between the N-Acetylglucosamine (GlcNAc) and asparagine linkage of N-linked oligosaccharides in glycoproteins (1).



### Product Information

Quantity:	10 ug
Specific Activity:	>100 U/mg
Purity:	>95% by SDS-PAGE
Molecular Weight:	34.8 kDa
Ext. coefficient:	2.01 (1 mg/mL at 280 nm in H <sub>2</sub> O)
Theoretical PI:	8.39
Storage:	<b>Buffer:</b> (20 mM Tris – pH 7.5, 50 mM NaCl, 0.5 mM EDTA) <b>Temperature:</b> 2-8°C. Avoid multiple freeze/thaw cycles. <b>Stability:</b> 1 year
Unit Definition:	One unit is defined as the amount of enzyme required to catalyze the release of >95% N-linked oligosaccharides from 60 $\mu$ moles of denatured ribonuclease B in 1 hour at 37 °C, pH 7.5. One micromolar unit of PNGase F activity is equal to 1,000 nanomolar units (IUB milliunits).

***For research use only. Not for use in humans.***

### Activity Assay

1. Added 1  $\mu\text{L}$  of 10X Denaturing Solution (5% SDS, 0.4 mM DTT) to 9  $\mu\text{L}$  of substrate solution (containing 1-20  $\mu\text{g}$  of glycoprotein of interest)
2. Incubate substrate solution from step 1 for 5 minutes at 99°C then put back on ice.
3. Added 2  $\mu\text{L}$  of 15% NP-40 solution, 2  $\mu\text{L}$  of 10X Deglycosylation Reaction Buffer (0.5 M sodium phosphate – pH 7.5), 4  $\mu\text{L}$  H<sub>2</sub>O, and 2  $\mu\text{L}$  PNGase F to denatured substrate. Include a control reaction by replacing the PNGase F with H<sub>2</sub>O.
4. Incubate reaction for 60 minutes at 37°C.
5. Analyze reaction by running treated and untreated reactions in separate lanes on SDS-PAGE gel. Proteins that have been deglycosylated will have increased mobility due to reduction in molecular weight.

### References

1. Maley, F. *et al.* (1989) *Anal. Biochem.* **180**:195.

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