

PNGase F PRIME™

Intended Use	<ul style="list-style-type: none"> • PNGase F PRIME™ catalyzes the cleavage of N-linked oligosaccharides from proteins.
Product Description	<ul style="list-style-type: none"> • PNGase F PRIME™ is a recombinant glycosidase, cloned from <i>Flavobacterium meningosepticum</i>. • Product is provided as a liquid in 1X PBS buffer in standard quantities (50 µL vials), or in bulk quantities (> 500 µL).
Biological Source	<ul style="list-style-type: none"> • <i>E. coli</i>.
Concentration	<ul style="list-style-type: none"> • The standard concentration is 10⁶ Units/mL [2.0 mg/mL].
Physical Form	<ul style="list-style-type: none"> • Supplied as a clear liquid in 1X PBS (Phosphate Buffered Saline; 137 mM NaCl, 10mM Phosphate, 2.7 mM KCl, pH7.4)
Storage Instructions	<ul style="list-style-type: none"> • Liquid enzyme must be stored at temperatures ranging from +2°C to -20° C.
Precautions	<ul style="list-style-type: none"> • Avoid multiple freeze-thaw cycles.
Usage	<ul style="list-style-type: none"> • Liquid enzyme is ready to use after thawing (if frozen).
Quality Control Testing	<ul style="list-style-type: none"> • PNGase F PRIME™ passes release criteria which indicate its effectiveness in high-end applications like HPLC/UPLC and Mass Spectrometry Imaging (MSI). • PNGase F PRIME™ also passes release criteria determined by standard gel analysis as determined by SDS-PAGE. • Quality Certification is performed by an independent party from N-Zyme Scientifics, LLC.

TECHNICAL DATA	
Unit Definition Assay	<ul style="list-style-type: none"> • Denatured RNase B (10µg) is incubated with PNGase F PRIME™ for 30 minutes at 37°C and then analyzed by SDS-PAGE. • Fully glycosylated RNase B migrates at approximately 17kDa. • Deglycosylation is assessed by the presence of deglycosylated RNase B with an apparent molecular weight of 13.7 kDa following staining via Coomassie Brilliant Blue™.
High-End Testing Criteria	<ul style="list-style-type: none"> • PNGase F PRIME™ is also designed for use in high-end applications and passes rigorous quality release criteria using HPLC/UPLC and Mass Spectrometry Imaging of tissue samples. • Denatured human IgG (10µg) is incubated with PNGase F PRIME™ for one hour before glycan is labeled with the Waters RapiFluor-MS dye and analyzed by normal phase hydrophilic interaction chromatography (HILIC).

	<ul style="list-style-type: none">• PNGase F PRIME™ is used for imaging of glycans from tissue sections as described in [Powers <i>et al.</i>, <i>PLoS One.</i> 2014, 9(9): e106255.] using both a Bruker Daltonics Solarix™ 7T Hybrid FTMS System and a Bruker Daltonics rapifleXTM MALDI Tissue typer.
Purity	<ul style="list-style-type: none">• ≥95% as determined by SDS-PAGE analysis and staining with Coomassie Brilliant Blue™.

For more information about this product, visit www.n-zymesci.com or email your request to prromano@n-zymesci.com

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