N-Zyme
Scientifics, LLC

PRODUCT SPECIFICATION SHEET

PNGase F PRIME-LY™

Intended Use	• Reconstituted PNGase F PRIME-LY™ catalyzes the cleavage of N-linked oligosaccharides from proteins.
Product Description	• PNGase F PRIME-LY™ is a lyophilized recombinant glycosidase cloned from *Flavobacterium meningosepticum*. • The product contains 100 µg of PNGase F PRIME™ at $5x10^4$ Units in a freeze-dried form.
Biological Source	• *E. coli.*
Concentration	• The standard Concentration is 10^6 Units/mL [2.0 mg/mL] after reconstituting in 50µL of dH_20.
Physical Form	• The PNGase F PRIME-LY™ is lyophilized from 20mM Tris-HCl, 50mM NaCl, pH 7.5, and supplied as a dry white powder. When resuspended in dH_2O, the final concentration will be 20 mM Tris-HCl, 50 mM NaCl, pH 7.5
Usage	• Lyophilized enzyme is ready for use after reconstituting with dH2O and vortexed.
Storage Instructions	• The PNGase F PRIME-LY™ is supplied lyophilized, is shipped at ambient temperature, and may be stored at room temperature upon arrival with desiccant. • After reconstitution, the enzyme is stable for 1 month and should be stored at temperatures ranging from +2° to -20°C.
Precautions	• After reconstitution, avoid multiple freeze-thaw cycles.
Quality Control Testing	• Reconstituted PNGase F PRIME-LY™ passes release criteria which indicate its effectiveness in high-end applications like HPLC/UPLC and Mass Spectrometry Imaging. • Reconstituted PNGase F PRIME-LY™ also passes release criteria determined by standard gel analysis as determined by SDS-PAGE. • Quality Certification is performed by a party independent from N-Zyme Scientifics, LLC.

TECHNICAL DATA	
Unit Definition Assay	• Denatured RNase B (10µg) is incubated with reconstituted PNGase F PRIME-LY™ 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	• Reconstituted PNGase F PRIME-LY™ is also designed for use in high-end applications and passes rigorous quality release criteria using HPLC/UPLC and Mass Spectrometry Imaging (MSI) of tissue samples. • Denatured human IgG (10µg) is incubated with reconstituted PNGase F PRIME-LY™ for one hour before glycan is labeled with the Waters RapiFluor-MS dye and analyzed by normal phase hydrophilic interaction chromatography (HILIC). • Reconstituted PNGase F PRIME-LY™ is used for imaging of glycans from tissue sections as described in [*Powers et al., PLoS One. 2014, 9(9): e106255.*] using systems such as a Bruker Daltonics SolariX™ 7T Hybrid FTMS System, Bruker Daltonics tims-TOF Flex, and a Bruker Daltonics rapifleX™ MALDI Tissuetyper.
Purity	• ≥95% for reconstituted PNGase F PRIME-LY™ 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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