

New England Biolabs Product Specification

<i>Product Name:</i>	<i>Rapid™ PNGase F (non-reducing format)</i>
<i>Catalog #:</i>	<i>P0711S</i>
<i>Concentration:</i>	<i>1 reaction/μl</i>
<i>Unit Definition:</i>	<i>N/A</i>
<i>Shelf Life:</i>	<i>12 months</i>
<i>Storage Temp:</i>	<i>4°C</i>
<i>Storage Conditions:</i>	<i>50 mM NaCl, 20 mM Tris-HCl, 5 mM EDTA, (pH 7.5 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-P0711S v2.0</i>
<i>Effective Date:</i>	<i>16 Jan 2018</i>

Assay Name/Specification (minimum release criteria)

Glycosidase Activity (Endo F1, F2, H) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled Endo F1, F2, H substrate (Dansylated invertase high mannose) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (Endo F2, F3) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled Endo F2, F3 substrate (Dansylated fibrinogen biantennary) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (β-Mannosidase) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Manβ1-4Manβ1-4Man-AMC) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (β-N-Acetylgalactosaminidase) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAcβ1-4Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (β-N-Acetylglucosaminidase) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (β-Xylosidase) - A 10 μl reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β-Xylosidase substrate (Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC) and 1 μl of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.



New England Biolabs Product Specification

Assay Name/Specification (minimum release criteria)

Glycosidase Activity (β 1-3 Galactosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -Galactosidase substrate (Gal β 1-3GlcNAc β 1-4Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (β 1-4 Galactosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -Galactosidase substrate (Gal β 1-4GlcNAc β 1-3Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α -Glucosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Glucosidase substrate (Glc α 1-6Glc α 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α -N-Acetylgalactosaminidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -N-Acetylgalactosaminidase substrate (GalNAc α 1-3(Fuc α 1-2)Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α -Neuraminidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Neuraminidase substrate (Neu5Ac α 2-3Gal β 1-3GlcNAc β 1-3Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α 1-2 Fucosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Fucosidase substrate (Fuc α 1-2Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α 1-3 Fucosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Fucosidase substrate (Fuc α 1-3Gal β 1-4GlcNAc β 1-3Gal β 1-4Glc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α 1-3 Galactosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Galactosidase substrate (Gal α 1-3Gal β 1-4GlcNAc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α 1-3 Mannosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Mannosidase substrate (Man α 1-3Man β 1-4GlcNAc-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Glycosidase Activity (α 1-6 Galactosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Galactosidase substrate (Gal α 1-6Gal α 1-6Glc α 1-2Fru-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.



New England Biolabs Product Specification

Assay Name/Specification (minimum release criteria)

Glycosidase Activity (α 1-6 Mannosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled α -Mannosidase substrate (Man α 1-6Man α 1-6(Man α 1-3)Man-AMC) and 1 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.

Protease Activity (SDS-PAGE) - A 20 μ l reaction in 1X Rapid PNGase F Buffer (non-reducing format) containing 24 μ g of a standard mixture of proteins and a minimum of 5 μ l of Rapid PNGase F (non-reducing format) incubated for 20 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.

Protein Purity Assay (SDS-PAGE) - Rapid PNGase F (non-reducing format) is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.



Date 16 Jan 2018

Derek Robinson
Director of Quality Control

