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New England Biolabs Certificate of Analysis

Product Name: Rapid PNGase F (non-reducing format)

Catalog #: P0711S
Concentration: 50 reactions

Unit Definition:N/ALot #:0021605Assay Date:05/2016Expiration Date:5/2017Storage Temp: $4^{\circ}C$

Storage Conditions: 50 mM NaCl, 20 mM Tris-HCl, 5 mM EDTA, (pH 7.5 @ 25°C)

Specification Version: PS-P0711S v1.0 Effective Date: 16 Feb 2016

Assay Name/Specification (minimum release criteria)	Lot #0021605
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.	Pass
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.	Pass
Glycosidase Activity (β -Mannosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -Mannosidase substrate (Man β 1-4Man β 1-4Man-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.	Pass
Glycosidase Activity (β -Xylosidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -Xylosidase substrate (Xyl β 1-4Xyl β 1-4Xyl β 1-4Xyl-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.	Pass









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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.	Pass
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.	Pass
Glycosidase Activity (β -N-Acetylgalactosaminidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -N-Acetylgalactosaminidase substrate (GalNAc 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.	Pass
Glycosidase Activity (β -N-Acetylglucosaminidase) - A 10 μ l reaction in Rapid PNGase F Buffer (non-reducing format) containing 1 nM of fluorescently-labeled β -N-Acetylglucosaminidase substrate (GlcNAc β 1-4GlcNAc 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.	Pass
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.	Pass
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 (Neu5Acα2-3Galβ1-3GlcNAcβ1-3Galβ1-4Glc-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.	Pass
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.	Pass
Glycosidase Activity ($\alpha 1$ -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 $\alpha 1$ -3Gal $\beta 1$ -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.	Pass









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Glycosidase Activity ($\alpha 1$ -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 $\alpha 1$ -3Gal $\beta 1$ -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.	Pass
Glycosidase Activity ($\alpha 1$ -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 $\alpha 1$ -3Man $\beta 1$ -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.	Pass
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.	Pass
Glycosidase Activity (α 1-6 Mannosidase) - A 10 μ 1 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 1 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.	Pass
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 (GalNAcα1-3 (Fucα1-2)Galβ1-4Glc-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.	Pass
Protease Activity (SDS-PAGE) - A 20 μl reaction in 1X Rapid PNGase F Buffer (non-reducing format) containing 24 μg of a standard mixture of proteins and a minimum of 5 μl 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.	Pass
Protein Purity Assay (SDS-PAGE) - Rapid PNGase F (non-reducing format) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

Authorized by Derek Robinson 16 Feb 2016







Inspected by Alicia Bielik 01 Jun 2016