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## New England Biolabs Certificate of Analysis

Product Name: Rapid™ PNGase F

Catalog Number: P0710S
Unit Definition: N/A

Packaging Lot Number: 10072130
Expiration Date: 04/2021
Storage Temperature: 4°C

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

Specification Version: PS-P0710S v2.0

Rapid™ PNGase F Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
P0710SVIAL	Rapid™ PNGase F	10072155	Pass	
B0718SVIAL	5X Rapid PNGase F Buffer	10072132	Pass	

Assay Name/Specification	Lot # 10072130
Glycosidase Activity (β1-4 Galactosidase) A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-Galactosidase substrate (Galβ1-4GlcNAcβ1-3Galβ1-4Glc -AMC) and 1 μl of Rapid PNGase F 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 containing 24 μg of a standard mixture of proteins and a minimum of 5 μl of Rapid PNGase F 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 is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Glycosidase Activity (β1-3 Galactosidase) A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-Galactosidase substrate (Galβ1-3GlcNAcβ1-4Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass



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Assay Name/Specification	Lot # 10072130
Glycosidase Activity (Endo F1, F2, H) A 10 µl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled Endo F1, F2, H substrate (Dansylated invertase high mannose) and 1 µl of Rapid PNGase F 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 containing 1 nM of fluorescently-labeled Endo F2, F3 substrate (Dansylated fibrinogen biantennary) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (α-Glucosidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-Glucosidase substrate (Glcα1-6Glcα1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at $37^{\circ}$ C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α-N-Acetylgalactosaminidase) A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-N-Acetylgalactosaminidase substrate (GalNAcα1-3(Fucα1-2)Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F 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 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-Neuraminidase substrate (Neu5Acα2-3Galβ1-3GlcNAcβ1-3Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-2 Fucosidase) A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-2Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-3 Fucosidase) A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-3 Galactosidase)	Pass



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Assay Name/Specification	Lot # 10072130
A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-3Galβ1-4GlcNAc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	
<b>Glycosidase Activity (α1-3 Mannosidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled $\alpha$ -Mannosidase substrate (Manα1-3Manβ1-4GlcNAc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (α1-6 Galactosidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled $\alpha$ -Galactosidase substrate (Galα1-6Galα1-6Glcα1-2Fru-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (α1-6 Mannosidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled $\alpha$ -Mannosidase substrate (Manα1-6Manα1-6(Manα1-3)Man-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (β-Mannosidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Man $\beta$ 1-4Man $\beta$ 1-4Man-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (β-N-Acetylgalactosaminidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAc $\beta$ 1-4Gal $\beta$ 1-4Glc-AMC) and 1 μl of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
<b>Glycosidase Activity (β-N-Acetylglucosaminidase)</b> A 10 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 1 μl of Rapid PNGase F 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 μl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled	Pass



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Assay Name/Specification	Lot # 10072130
β-Xylosidase substrate (Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC) and 1 μl of Rapid PNGase F	
incubated for 20 hours at 37°C results in no detectable activity as determined by	
thin layer chromatography.	

This product has been tested and shown to be in compliance with all specifications.

Alicia Bielik

Production Scientist

30 Apr 2020

Jay Minichiello

Packaging Quality Control Inspector

30 Apr 2020

