

## New England Biolabs Certificate of Analysis

**Product Name:** Rapid™ PNGase F  
**Catalog Number:** P0710S  
**Unit Definition:** N/A  
**Lot Number:** 10013511  
**Expiration Date:** 05/2019  
**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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0710SVIAL	Rapid™ PNGase F	10007355	Pass
B0718SVIAL	5X Rapid PNGase F Buffer	10007362	Pass

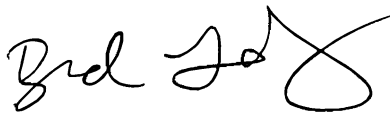
Assay Name/Specification	Lot # 10013511
<b>Protein Purity Assay (SDS-PAGE)</b> Rapid PNGase F is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
<b>Protease Activity (SDS-PAGE)</b> A 20 µl reaction in 1X Rapid PNGase F Buffer containing 24 µg of a standard mixture of 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
<b>Glycosidase Activity (α-N-Acetylgalactosaminidase)</b> 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
<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°C results in no detectable activity as determined by thin layer chromatography.	Pass

Assay Name/Specification	Lot # 10013511
<p><b>Glycosidase Activity (<math>\beta</math>1-3 Galactosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\beta</math>-Galactosidase substrate (Gal<math>\beta</math>1-3GlcNAc<math>\beta</math>1-4Gal<math>\beta</math>1-4Glc-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>-Neuraminidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Neuraminidase substrate (Neu5Ac<math>\alpha</math>2-3Gal<math>\beta</math>1-3GlcNAc<math>\beta</math>1-3Gal<math>\beta</math>1-4Glc-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>1-3 Mannosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Mannosidase substrate (Man<math>\alpha</math>1-3Man<math>\beta</math>1-4GlcNAc-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>1-3 Fucosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Fucosidase substrate (Fuc<math>\alpha</math>1-3Gal<math>\beta</math>1-4GlcNAc<math>\beta</math>1-3Gal<math>\beta</math>1-4Glc-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>1-3 Galactosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Galactosidase substrate (Gal<math>\alpha</math>1-3Gal<math>\beta</math>1-4GlcNAc-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>1-6 Mannosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Mannosidase substrate (Man<math>\alpha</math>1-6Man<math>\alpha</math>1-6(Man<math>\alpha</math>1-3)Man-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\alpha</math>1-6 Galactosidase)</b> A 10 <math>\mu</math>l reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled <math>\alpha</math>-Galactosidase substrate (Gal<math>\alpha</math>1-6Gal<math>\alpha</math>1-6Glc<math>\alpha</math>1-2Fru-AMC) and 1 <math>\mu</math>l of Rapid PNGase F incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<p><b>Glycosidase Activity (<math>\beta</math>-Mannosidase)</b></p>	Pass

Assay Name/Specification	Lot # 10013511
<p>A 10 µl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Manβ1-4Manβ1-4Man-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.</p>	
<p><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 (GalNacβ1-4Galβ1-4Glc-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.</p>	<b>Pass</b>
<p><b>Glycosidase Activity (β1-4 Galactosidase)</b> 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.</p>	<b>Pass</b>
<p><b>Glycosidase Activity (β-Xylosidase)</b> A 10 µl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled 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.</p>	<b>Pass</b>
<p><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.</p>	<b>Pass</b>
<p><b>Glycosidase Activity (α1-2 Fucosidase)</b> 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.</p>	<b>Pass</b>
<p><b>Glycosidase Activity (Endo F1, F2, H)</b> 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.</p>	<b>Pass</b>
<p><b>Glycosidase Activity (Endo F2, F3)</b> A 10 µl reaction in Rapid PNGase F Buffer containing 1 nM of fluorescently-labeled</p>	<b>Pass</b>

Assay Name/Specification	Lot # 10013511
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.	

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



Brad Landgraf  
Production Scientist  
09 May 2018



Josh Hersey  
Packaging Quality Control Inspector  
06 Jul 2018