

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name:	β1-3,4 Galactosidase
Catalog Number:	P0746S
Concentration:	8,000 U/ml
Unit Definition:	One unit is defined as the amount of enzyme required to cleave > 95% of the terminal, β -D-galactose from 1 nmol Gal β 1-4GlcNAc β 1- 3Gal β 1-4Glc-7-amino-4-methyl-coumarin (AMC), in 1 hour at 37°C in a total reaction volume of 10 μ l.
Lot Number:	10021653
Expiration Date:	06/2019
Storage Temperature:	4°C
Storage Conditions:	50 mM NaCl, 20 mM Tris-HCl, 1 mM EDTA, (pH 7.5 @ 25°C)
Specification Version:	PS-P0746S/L v1.0

β1-3,4 Galactosidase Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
P0746SVIAL	β1-3,4 Galactosidase	10009610	Pass	
B1703SVIAL	10X Glycobuffer 4	0021710	Pass	

Assay Name/Specification	Lot # 10021653
Protease Activity (SDS-PAGE) A 20 μ l reaction in 1X Glyco Buffer 4 containing 24 μ g of a standard mixture of proteins and a minimum of 40 units of β 1-3,4 Galactosidase 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
Glycosidase Activity (Endo F1, F2, H) A 10 μ l reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled Endo F1, F2, H substrate (Dansylated invertase high mannose) and 16 units of β 1-3,4 Galactosidase 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 μ l reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled Endo F2, F3 substrate (Dansylated fibrinogen biantennary) and 16 units of β 1-3,4 Galactosidase 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 # 10021653
Glycosidase Activity (PNGase F) A 10 μ I reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled PNGase F substrate (Fluoresceinated fetuin triantennary) and 16 units of β 1-3,4 Galactosidase 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 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Glucosidase substrate (Glc α 1-6Glc α 1-4Glc-AMC) and 16 units of β 1-3,4 Galactosidase 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 I reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Neuraminidase substrate (Neu5Ac α 2-3Gal β 1-3GlcNAc β 1-3Gal β 1-4Glc-AMC) and 16 units of β 1-3,4 Galactosidase 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 Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Fucosidase substrate (Fuc α 1-2Gal β 1-4Glc-AMC) and 16 units of β 1-3,4 Galactosidase 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 Glyco Buffer 4 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc-AMC) and 16 units of β1-3,4 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-3 Galactosidase) A 10 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Galactosidase substrate (Gal α 1-3Gal β 1-4GlcNAc-AMC) and 16 units of β 1-3,4 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-3 Mannosidase) A 10 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Mannosidase substrate (Man α 1-3Man β 1-4GlcNAc-AMC) and 16 units of β 1-3,4 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass
Glycosidase Activity (α1-6 Galactosidase)	Pass





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A 10 μ I reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Galactosidase substrate (Gal α 1-6Gal α 1-6Glc α 1-2Fru-AMC) and 16 units of β 1-3,4 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	
Glycosidase Activity (α1-6 Mannosidase) A 10 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -Mannosidase substrate (Man α 1-6(Man α 1-3)Man-AMC) and 16 units of β 1-3,4 Galactosidase 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 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled α -N-Acetylgalactosaminidase substrate (GalNAc α 1-3(Fuc α 1-2)Gal β 1-4Glc-AMC) and 16 units of β 1-3,4 Galactosidase 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 I reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled β -Mannosidase substrate (Man β 1-4Man β 1-4Man-AMC) and 16 units of β 1-3,4 Galactosidase 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 Glyco Buffer 4 containing 1 nM of fluorescently-labeled β -Xylosidase substrate (Xyl β 1-4Xyl β 1-4Xyl β 1-4Xyl-AMC) and 16 units of β 1-3,4 Galactosidase 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 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled β -N-Acetylgalactosaminidase substrate (GalNAc β 1-4Gal β 1-4Glc-AMC) and 16 units of β 1-3,4 Galactosidase 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 µl reaction in Glyco Buffer 4 containing 1 nM of fluorescently-labeled β -N-Acetylglucosaminidase substrate (GlcNAc β 1-4GlcNAc β 1-4GlcNAc-AMC) and 16 units of β 1-3,4 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.	Pass

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





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Brad Landgraf Production Scientist 22 Jun 2018

Michae 11.

Michael Tonello Packaging Quality Control Inspector 09 Oct 2018

