240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
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New England Biolabs
Certificate of Analysis

Product Name:	*Endo-β-Galactosidase*
Catalog Number:	*P0777S*
Concentration:	*0.5 mg/ml*
Unit Definition:	*The enzyme activity is determined by its ability to cleave over 95% of 2 nmol Galβ1-4GlcNAcβ1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc-7-amino-4-methyl-coumarin (AMC) using less than 10 ng of enzyme within 1 hour at 37°C, in a total reaction volume of 20 µl.*
Packaging Lot Number:	*10281336*
Expiration Date:	*02/2027*
Storage Temperature:	*-20°C*
Storage Conditions:	*50 mM Sodium Acetate, 50 mM Sodium Chloride (pH 5.5 @ 25°C)*
Specification Version:	*PS-P0777S v1.0*

Endo-β-Galactosidase Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
P0777SVIAL	Endo-β-Galactosidase	10279640	**Pass**
B1720SVIAL	10X Glycobuffer 3	10245395	**Pass**

Assay Name/Specification	**Lot # 10281336**
Glycosidase Activity (PNGase F) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled PNGase F substrate (Fluoresceinated fetuin triantennary) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α-Glucosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Glucosidase substrate (Glcα1-6Glcα1-4Glc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α-N-Acetylgalactosaminidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-N-Acetylgalactosaminidase substrate (GalNAcα1-3(Fucα1-2)Galβ1-4Glc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**

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Assay Name/Specification	Lot # 10281336
Glycosidase Activity (α1-2 Fucosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-2Galβ1-4Glc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α1-3 Galactosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-3Galβ1-4GlcNAc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α1-3 Mannosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Mannosidase substrate (Manα1-3Manβ1-4GlcNAc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α1-6 Galactosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-6Galα1-6Glcα1-2Fru-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (α1-6 Mannosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled α-Mannosidase substrate (Manα1-6Manα1-6(Manα1-3)Man-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (β-Mannosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Manβ1-4Manβ1-4Man-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (β-N-Acetylgalactosaminidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAcβ1-4Galβ1-4Glc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Glycosidase Activity (β-N-Acetylglucosaminidase)	**Pass**

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Assay Name/Specification	Lot # 10281336
A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	
Glycosidase Activity (β-Xylosidase) A 10 µl reaction in Glyco Buffer 3 containing 1 nM of fluorescently-labeled β-Xylosidase substrate (Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC) and 1 µg of Endo-β-Galactosidase incubated for 20 hours at 37ºC results in no detectable activity as determined by thin layer chromatography.	**Pass**
Protease Activity (SDS-PAGE) A 20 µl reaction in 1X Glyco Buffer 3 containing 24 µg of a standard mixture of proteins and a minimum of 2 µg of Endo-β-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**
Protein Purity Assay (SDS-PAGE) Endo-β-Galactosidase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	**Pass**

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Maxwell Elkus
Production Scientist
25 Feb 2025

Josh Hersey
Packaging Quality Control Inspector
07 Mar 2025