

New England Biolabs Certificate of Analysis

Product Name: β 1-3 Galactosidase
Catalog Number: P0726S
Concentration: 10,000 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 of Gal β 1-3GlcNAc 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.
Packaging Lot Number: 10218627
Expiration Date: 10/2025
Storage Temperature: -20°C
Storage Conditions: 50 mM NaCl, 20 mM Tris-HCl, 1 mM EDTA, (pH 7.5 @ 25°C)
Specification Version: PS-P0726S/L v1.0

β 1-3 Galactosidase Component List

| NEB Part Number | Component Description | Lot Number | Individual QC Result |
|-----------------|---------------------------|------------|----------------------|
| P0726SVIAL | β 1-3 Galactosidase | 10209963 | Pass |
| B9001SVIAL | Purified BSA | 10206704 | Pass |
| B1727SVIAL | 10X GlycoBuffer 1 | 10181128 | Pass |

| Assay Name/Specification | Lot # 10218627 |
|---|----------------|
| Glycosidase Activity (Endo F1, F2, H) A 10 μ l reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled Endo F1, F2, H substrate (Dansylated invertase high mannose) and 100 units of β 1-3 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 1 containing 1 nM of fluorescently-labeled Endo F2, F3 substrate (Dansylated fibrinogen biantennary) and 100 units of β 1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Glycosidase Activity (PNGase F) A 10 μ l reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled PNGase F substrate (Fluoresceinated fetuin triantennary) and 100 units of β 1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |

| Assay Name/Specification | Lot # 10218627 |
|--|----------------|
| <p>Glycosidase Activity (α-Glucosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Glucosidase substrate (Glcα1-6Glcα1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α-N-Acetylgalactosaminidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-N-Acetylgalactosaminidase substrate (GalNAcα1-3(Fucα1-2)Galβ1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α-Neuraminidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Neuraminidase substrate (Neu5Acα2-3Galβ1-3GlcNAcβ1-3Galβ1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α1-2 Fucosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-2Galβ1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α1-3 Fucosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α1-3 Galactosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-3Galβ1-4GlcNAc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α1-3 Mannosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Mannosidase substrate (Manα1-3Manβ1-4GlcNAc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |

| Assay Name/Specification | Lot # 10218627 |
|---|----------------|
| <p>Glycosidase Activity (α1-6 Galactosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-6Galα1-6Glcα1-2Fru-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (α1-6 Mannosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Mannosidase substrate (Manα1-6Manα1-6(Manα1-3)Man-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (β-Mannosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Manβ1-4Manβ1-4Man-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (β-N-Acetylgalactosaminidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAcβ1-4Galβ1-4Glc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (β-N-Acetylglucosaminidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (β-Xylosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-Xylosidase substrate (Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC) and 100 units of β1-3 Galactosidase incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Protease Activity (SDS-PAGE) A 20 μl reaction in 1X Glyco Buffer 1 containing 24 μg of a standard mixture of proteins and a minimum of 100 units of β1-3 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.</p> | Pass |
| <p>Protein Purity Assay (SDS-PAGE)</p> | Pass |

| Assay Name/Specification | Lot # 10218627 |
|---|----------------|
| β1-3 Galactosidase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | |

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
05 Oct 2023



Josh Hersey
Packaging Quality Control Inspector
29 Nov 2023