

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: Boletopsis grisea Lectin (BGL)

Catalog Number: P0867S
Concentration: 1 mg/ml
Packaging Lot Number: 10198771
Expiration Date: 08/2025
Storage Temperature: -20°C

Storage Conditions: 50mM Tris-HCl, 200mM NaCl (pH 7.5 @ 25°C)

Specification Version: PS-P0867S v2.0

| Boletopsis grisea Lectin (BGL) Component List | | | | |
|---|--------------------------------|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| P0867SVIAL | Boletopsis grisea Lectin (BGL) | 10191219 | Pass | |

| Assay Name/Specification | Lot # 10198771 |
|---|----------------|
| Functional Testing (Epitope Directed Glycan Enrichment) A 120 µl reaction in 20 mM Tris-HCl pH 7.5 containing 100 ng of fluorescently labeled with procainamide G0/A2 N-glycan (asialo-, agalacto-, biantennary complex N-glycan) and 100 µg BGL lectin incubated for 1.5 hours at 25°C results in ≥85% enrichment as determined by UPLC-HILIC-FLR. | Pass |
| Glycosidase Activity (Endo F1, F2, H) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled Endo F1, F2, H substrate (Dansylated invertase high mannose) and 1 μl of Boletopsis grisea Lectin (BGL) 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 Glyco Buffer 1 containing 1 nM of fluorescently-labeled Endo F2, F3 substrate (Dansylated fibrinogen biantennary) and 1 μl of Boletopsis grisea Lectin (BGL) 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 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled PNGase F substrate (Fluoresceinated fetuin triantennary) and 1 μl of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |



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| A a a a a Nama (On a sification | 1 -4 # 40400774 |
|--|---------------------|
| Assay Name/Specification 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 1 μl of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Lot # 10198771 Pass |
| 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 1 μl of Boletopsis grisea Lectin (BGL) 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 Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Neuraminidase substrate (Neu5Acα2-3Galβ1-3GlcNAcβ1-3Galβ1-4Glc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-2Galβ1-4Glc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled α-Fucosidase substrate (Fucα1-3Galβ1-4GlcNAcβ1-3Galβ1-4Glc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-3Galβ1-4GlcNAc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled α-Mannosidase substrate (Manα1-3Manβ1-4GlcNAc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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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|---|----------------|
| Assay Name/Specification A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled α-Galactosidase substrate (Galα1-6Galα1-6Glcα1-2Fru-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Lot # 10198771 |
| 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 1 μl of Boletopsis grisea Lectin (BGL) 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 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-Mannosidase substrate (Manβ1-4Manβ1-4Man-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAcβ1-4Galβ1-4Glc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) 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 1 containing 1 nM of fluorescently-labeled β-Xylosidase substrate (Xylβ1-4Xylβ1-4Xylβ1-4Xyl-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Glycosidase Activity (β1-3 Galactosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled β-Galactosidase substrate (Galβ1-3GlcNAcβ1-4Galβ1-4Glc-AMC) and 1 μl of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Glycosidase Activity (β1-4 Galactosidase) A 10 μl reaction in Glyco Buffer 1 containing 1 nM of fluorescently-labeled | Pass |



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| Assay Name/Specification | Lot # 10198771 |
|--|----------------|
| β-Galactosidase substrate (Gal $β$ 1-4GlcNAc $β$ 1-3Gal $β$ 1-4Glc -AMC) and 1 $μ$ I of Boletopsis grisea Lectin (BGL) incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | |
| Protease Activity (Non-Specific, SDS-PAGE) A 20 μl reaction in 1X Glyco Buffer 2 containing 24 μg of a standard mixture of proteins and a minimum of 7 μl of Boletopsis grisea Lectin (BGL) was incubated for 20 hours at 37°C. After incubation, no detectable degradation of the protein mixture was determined by SDS-PAGE with Coomassie Blue detection. | Pass |
| Protein Purity Assay (SDS-PAGE) Boletopsis grisea Lectin (BGL) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | Pass |
| RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Boletopsis grisea Lectin (BGL) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by | Pass |

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

gel electrophoresis using fluorescent detection.

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Jenna Ware Production Scientist 14 Aug 2023 Michael Tonello

Packaging Quality Control Inspector

10 Jan 2024

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