

New England Biolabs Certificate of Analysis

Product Name: *Bacteroides Heparinase I*
Catalog Number: *P0735L*
Concentration: *12,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme that will liberate 1.0 μ mol unsaturated oligosaccharides from porcine mucosal heparin per minute at 30°C and pH 7.0 in a total reaction volume of 100 μ l.*
Packaging Lot Number: *10069479*
Expiration Date: *06/2021*
Storage Temperature: *-80°C*
Storage Conditions: *100 mM NaCl, 20 mM Tris-HCl, 1 mM EDTA, 5 mM CaCl₂, (pH 7.5 @ 25°C)*
Specification Version: *PS-P0735S/L v1.0*

| Bacteroides Heparinase I Component List | | | |
|---|--|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| P0735LVIAL | Bacteroides Heparinase I | 10069478 | Pass |
| B0735SVIAL | Bacteroides Heparinase Reaction Buffer (10X) | 10052584 | Pass |

| Assay Name/Specification | Lot # 10069479 |
|--|----------------|
| <p>Glycosidase Activity (β1-3 Galactosidase) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β-Galactosidase substrate (Galβ1-3GlcNAcβ1-4Galβ1-4Glc-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Glycosidase Activity (β1-4 Galactosidase) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β-Galactosidase substrate (Galβ1-4GlcNAcβ1-3Galβ1-4Glc-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°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 Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β-N-Acetylgalactosaminidase substrate (GalNAcβ1-4Galβ1-4Glc-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |

| Assay Name/Specification | Lot # 10069479 |
|--|----------------|
| <p>Glycosidase Activity (β-N-Acetylglucosaminidase) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°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 Heparinase Reaction Buffer containing 24 μg of a standard mixture of proteins and a minimum of 120 units of Bacteroides Heparinase I 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) Bacteroides Heparinase I is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p> | Pass |
| <p>Sulfatase Activity (2-O) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled 2-O-Sulfatase substrate (ΔUA2S-(1-4)-GlcNS6S-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |
| <p>Sulfatase and Uronidase Activity (N,6-O) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled N,6-O-Sulfatase substrate (ΔUA-(1-4)-GlcNS6S-AMC) and 24 units of Bacteroides Heparinase I incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography.</p> | Pass |

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



Alicia Bielik
Production Scientist
10 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
10 Jul 2020