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New England Biolabs Certificate of Analysis

Product Name: Bacteroides Heparinase III

Catalog Number: P0737L
Concentration: 700 U/ml

Unit Definition: One unit is defined as the amount of enzyme that will liberate 1.0

µmol unsaturated oligosaccharides from heparan sulfate per minute at

30°C and pH 7.0 in a total reaction volume of 100 μl.

Packaging Lot Number: 10050017
Expiration Date: 09/2020
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-P0737S/L v1.0

| Bacteroides Heparinase III Component List | | | | |
|---|--|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| P0737LVIAL | Bacteroides Heparinase III | 10052398 | Pass | |
| B0735SVIAL | Bacteroides Heparinase Reaction Buffer (10X) | 10052584 | Pass | |

| Assay Name/Specification | Lot # 10050017 |
|--|----------------|
| Protein Purity Assay (SDS-PAGE) Bacteroides Heparinase III is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | Pass |
| 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 5 units of Bacteroides Heparinase III 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 (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 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Glycosidase Activity (β-N-Acetylglucosaminidase) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β-N-Acetylglucosaminidase substrate | Pass |



P0737L / Lot: 10050017

Page 1 of 2

| Assay Name/Specification | Lot # 10050017 |
|---|----------------|
| (GlcNAcβ1-4GlcNAcβ1-4GlcNAc-AMC) and 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | |
| 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 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| 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 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| 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 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| 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 1 unit of Bacteroides Heparinase III incubated for 20 hours at 30°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.

Brad Landgraf Production Scientist

30 Sep 2019

Josh Hersey

Packaging Quality Control Inspector

06 Jan 2020



P0737L / Lot: 10050017

Page 2 of 2