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New England Biolabs Certificate of Analysis

Product Name: Bacteroides Heparinase II

Catalog Number: P0736L
Concentration: 4,000 U/ml

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

µmol unsaturated oligosaccharides from porcine mucosal heparin per

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

Packaging Lot Number: 10062642
Expiration Date: 12/2020
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-P0736S/L v1.0

| Bacteroides Heparinase II Component List | | | | |
|--|--|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| P0736LVIAL | Bacteroides Heparinase II | 10062641 | Pass | |
| B0735SVIAL | Bacteroides Heparinase Reaction Buffer (10X) | 10052584 | Pass | |

| Assay Name/Specification | Lot # 10062642 |
|---|----------------|
| 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 8 units of Bacteroides Heparinase II incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Glycosidase Activity (β -N-Acetylgalactosaminidase) A 10 μ l reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β -N-Acetylgalactosaminidase substrate (GalNAc β 1-4Gal β 1-4Glc-AMC) and 8 units of Bacteroides Heparinase II incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | 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 8 units of Bacteroides Heparinase II incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography. | Pass |



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| Assay Name/Specification | Lot # 10062642 |
|---|----------------|
| 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 8 units of Bacteroides Heparinase II 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 8 units of Bacteroides Heparinase II 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 8 units of Bacteroides Heparinase II incubated for 20 hours at 37°C results in no detectable activity as determined by thin layer chromatography. | Pass |
| Protein Purity Assay (SDS-PAGE) Bacteroides Heparinase II 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 20 units of Bacteroides Heparinase II 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 |

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

Brad Landgraf Production Scientist

17 Dec 2019

Michael Tonello

Packaging Quality Control Inspector

31 Jan 2020

