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New England Biolabs Certificate of Analysis

Product Name: Bacteroides Heparinase III

Catalog Number: P0737S
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.

Lot Number: 10039997
Expiration Date: 04/2020
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	
P0737SVIAL	Bacteroides Heparinase III	10039998	Pass	
B0735SVIAL	Bacteroides Heparinase Reaction Buffer (10X)	10034984	Pass	

Assay Name/Specification	Lot # 10039997
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
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-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



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Assay Name/Specification	Lot # 10039997
Glycosidase Activity (β-N-Acetylglucosaminidase) A 10 μl reaction in Heparinase Reaction Buffer containing 1 nM of	Pass
fluorescently-labeled β-N-Acetylglucosaminidase substrate	
(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.	
Protease Activity (SDS-PAGE)	Pass
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.	
Protein Purity Assay (SDS-PAGE) Bacteroides Heparinase III is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Sulfatase Activity (2-0)	Pass
A 10 μI 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.	
Sulfatase and Uronidase Activity (N,6-O)	Pass
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.	

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

Brad Landgraf Production Scientist

24 Jan 2019

Michael Tonello

Packaging Quality Control Inspector

01 Jul 2019



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