

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 μ mol unsaturated oligosaccharides from heparan sulfate per minute at 30°C and pH 7.0 in a total reaction volume of 100 μ l.
Packaging Lot Number: 10090901
Expiration Date: 11/2021
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-P0737S/L v1.0

Bacteroides Heparinase III Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0737LVIAL	Bacteroides Heparinase III	10090688	Pass
B0735SVIAL	Bacteroides Heparinase Reaction Buffer (10X)	10081039	Pass

Assay Name/Specification	Lot # 10090901
Protein Purity Assay (SDS-PAGE) Bacteroides Heparinase III is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Sulfatase Activity (2-O) A 10 μ l reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled 2-O-Sulfatase substrate (Δ UA2S-(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 and Uronidase Activity (N,6-O) A 10 μ l reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled N,6-O-Sulfatase substrate (Δ UA-(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
Glycosidase Activity (β1-3 Galactosidase) A 10 μ l reaction in Heparinase Reaction Buffer containing 1 nM of fluorescently-labeled β -Galactosidase substrate (Gal β 1-3GlcNAc β 1-4Gal β 1-4Glc-AMC)	Pass

Assay Name/Specification	Lot # 10090901
<p>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.</p>	
<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 1 unit of Bacteroides Heparinase III 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 1 unit of Bacteroides Heparinase III 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-Acetylglucosaminidase) A 10 µl reaction in Heparinase Reaction Buffer containing 1 nM of 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.</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 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.</p>	Pass

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

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