

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 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: 10228120
Expiration Date: 01/2025
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	10226303	Pass
B0735SVIAL	Bacteroides Heparinase Reaction Buffer (10X)	10204911	Pass

Assay Name/Specification	Lot # 10228120
<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>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.</p>	Pass

Assay Name/Specification	Lot # 10228120
<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>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
<p>Protein Purity Assay (SDS-PAGE) Bacteroides Heparinase III 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 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>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.</p>	Pass

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

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Maxwell Elkus
Production Scientist
12 Jan 2024



Josh Hersey
Packaging Quality Control Inspector
02 Feb 2024