

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: 10109986
Expiration Date: 09/2022
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	10109985	Pass
B0735SVIAL	Bacteroides Heparinase Reaction Buffer (10X)	10105362	Pass

Assay Name/Specification	Lot # 10109986
<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 ($\Delta\text{UA}-(1-4)\text{-GlcNS6S-AMC}$) 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.</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 ($\Delta\text{UA}2\text{S}-(1-4)\text{-GlcNS6S-AMC}$) 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.</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 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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE)</p>	Pass

Assay Name/Specification	Lot # 10109986
<p>Bacteroides Heparinase II is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	
<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 8 units of Bacteroides Heparinase II 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 8 units of Bacteroides Heparinase II incubated for 20 hours at 30°C results in no detectable activity as determined by thin layer chromatography.</p>	Pass
<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 8 units of Bacteroides Heparinase II 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 8 units of Bacteroides Heparinase II 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Alicia Bielik
Production Scientist
08 Dec 2021



Michael Tonello
Packaging Quality Control Inspector
08 Dec 2021