

## New England Biolabs Certificate of Analysis

**Product Name:** *beta-Agarase I*  
**Catalog Number:** M0392L  
**Concentration:** 1,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 200 µl of molten low melting point or NuSieve agarose to nonprecipitable neoagaro-oligosaccharides in 1 hour at 42°C  
**Packaging Lot Number:** 10137956  
**Expiration Date:** 01/2024  
**Storage Temperature:** -20°C  
**Storage Conditions:** 50 mM Bis-Tris-HCl, 1 mM EDTA, 50 % Glycerol, (pH 6.5 @ 25°C)  
**Specification Version:** PS-M0392S/L v1.0

beta-Agarase I Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0392LVIAL	β-Agarase I	10137955	Pass
B0392SVIAL	β-Agarase I Reaction Buffer	10137959	Pass

Assay Name/Specification	Lot # 10137956
<b>Protein Purity Assay (SDS-PAGE)</b> β-Agarase I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
<b>RNase Activity (Extended Digestion)</b> A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of β-Agarase I is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 10 units of β-Agarase I incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 5 units of β-Agarase I incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass

Assay Name/Specification	Lot # 10137956
<p><b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 1 unit of β-Agarase I incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	<p><b>Pass</b></p>

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

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Vanessa Mathieu-Sheltry  
Production Scientist  
17 Mar 2022



Michael Tonello  
Packaging Quality Control Inspector  
17 Mar 2022