

## New England Biolabs Certificate of Analysis

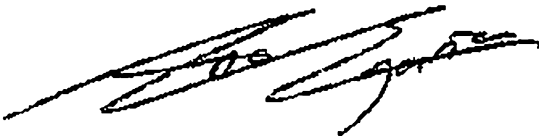
**Product Name:** *beta-Agarase I*  
**Catalog Number:** *M0392L*  
**Concentration:** *1,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 200 µl of molten low melting point or NuSieve agarose to nonprecipitable neoagaro-oligosaccharides in 1 hour at 42°C*  
**Packaging Lot Number:** *10050909*  
**Expiration Date:** *08/2021*  
**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	10050908	Pass
B0392SVIAL	β-Agarase I Reaction Buffer	10054316	Pass

Assay Name/Specification	Lot # 10050909
<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>	Pass
<p><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 &lt;0.1% of the total radioactivity.</p>	Pass
<p><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.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b>            β-Agarase I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

Assay Name/Specification	Lot # 10050909
<p><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, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	<p><b>Pass</b></p>

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



Ana Egana  
Production Scientist  
18 Oct 2019



Michael Tonello  
Packaging Quality Control Inspector  
18 Oct 2019