

New England Biolabs Certificate of Analysis

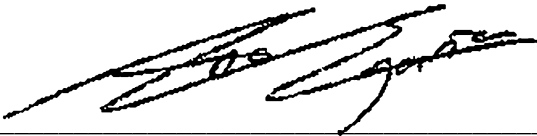
Product Name: *beta-Agarase I*
Catalog Number: M0392L
Concentration: 1,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 200 μ l of molten low melting point or NuSieve agarose to nonprecipitable neoagaro-oligosaccharides in 1 hour at 42°C
Lot Number: 10030184
Expiration Date: 01/2021
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	10028254	Pass
B0392SVIAL	β -Agarase I Reaction Buffer	10028255	Pass

Assay Name/Specification	Lot # 10030184
<p>Exonuclease Activity (Radioactivity Release) A 50 μl reaction in CutSmart® Buffer containing 1 μg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) 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>Protein Purity Assay (SDS-PAGE) β-Agarase I is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>RNase Activity (Extended Digestion) 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.</p>	Pass

Assay Name/Specification	Lot # 10030184
<p>Endonuclease Activity (Nicking) 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 <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	<p>Pass</p>

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



Ana Egana
Production Scientist
09 Jan 2019



Michael Tonello
Packaging Quality Control Inspector
09 Jan 2019