

New England Biolabs Certificate of Analysis

Product Name: *beta-Agarase I*
Catalog Number: *M0392S*
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*
Packaging Lot Number: *10238105*
Expiration Date: *02/2026*
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
M0392SVIAL	β -Agarase I	10226092	Pass
B0392SVIAL	β -Agarase I Reaction Buffer	10225760	Pass

Assay Name/Specification	Lot # 10238105
Endonuclease Activity (Nicking) A 50 μ l reaction in CutSmart® Buffer containing 1 μ g 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.	Pass
Exonuclease Activity (Radioactivity Release) A 50 μ l reaction in CutSmart® Buffer containing 1 μ g of a mixture of single and double-stranded [³ 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
Non-Specific DNase Activity (16 Hour) A 50 μ l reaction in CutSmart® Buffer containing 1 μ g 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
Protein Purity Assay (SDS-PAGE) β -Agarase I is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

Assay Name/Specification	Lot # 10238105
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.	Pass

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

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Chris Provost
Production Scientist
11 Mar 2024



Josh Hersey
Packaging Quality Control Inspector
13 May 2024