

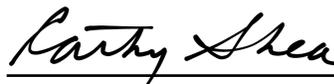
New England Biolabs Certificate of Analysis

Product Name: β -Agarase I
Catalog #: M0392S/L
Concentration: 1,000 units/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 #: 0271706
Assay Date: 06/2017
Expiration Date: 6/2019
Storage Temp: -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
Effective Date: 16 Jun 2016

Assay Name/Specification (minimum release criteria)	Lot #0271706
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] <i>E. coli</i> 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
RNase Activity (Extended Digestion) - A 10 μ l reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 μ l 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



Authorized by
Derek Robinson
16 Jun 2016



Inspected by
Cathy Shea
23 Jun 2017

