

New England Biolabs Certificate of Analysis

Product Name: Agel
Catalog Number: R0552L
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction of 50 µl.
Lot Number: 10042666
Expiration Date: 11/2020
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA
Specification Version: PS-R0552S/L v1.0

Agel Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0552LVIAL	Agel	10027889	Pass
B7201SVIAL	NEBuffer™ 1.1	0131803	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10021139	Pass


Assay Name/Specification	Lot # 10042666
Blue-White Screening (Terminal Integrity) A sample of LITMUS28i vector linearized with a 10-fold excess of Agel, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of Agel incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Agel, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Agel.	Pass
Non-Specific DNase Activity (16 hour) A 50 µl reaction in NEBuffer 1.1 containing 1 µg of Lambda DNA and a minimum of 5 Units of Agel incubated for 16 hours at 37°C results in a DNA pattern free of	Pass

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detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	

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



Jianying Luo
Production Scientist
12 Nov 2018



Michael Tonello
Packaging Quality Control Inspector
08 May 2019