

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: *10010527*
Expiration Date: *06/2020*
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	10010528	Pass
B7201SVIAL	NEBuffer™ 1.1	0121709	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	0241804	Pass

Assay Name/Specification	Lot # 10010527
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
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 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.	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

Assay Name/Specification	Lot # 10010527
<p>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.</p>	<p>Pass</p>

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



Jianying Luo
Production Scientist
08 Jun 2018



Michael Tonello
Packaging Quality Control Inspector
26 Jun 2018