

New England Biolabs Certificate of Analysis

Product Name: *Agel*
Catalog Number: *R0552S*
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.*
Packaging Lot Number: *10070389*
Expiration Date: *03/2022*
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
R0552SVIAL	Agel	10070388	Pass
B7201SVIAL	NEBuffer™ 1.1	10065750	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10065747	Pass

Assay Name/Specification	Lot # 10070389
<p>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.</p>	Pass
<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>	Pass
<p>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.</p>	Pass

Assay Name/Specification	Lot # 10070389
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

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


Penghua Zhang
Production Scientist
21 May 2020


Josh Hersey
Packaging Quality Control Inspector
21 May 2020