

## 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.  
**Lot Number:** 10010529  
**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
R0552SVIAL	Agel	10010530	Pass
B7201SVIAL	NEBuffer™ 1.1	0131803	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	0251805	Pass

Assay Name/Specification	Lot # 10010529
<p><b>Blue-White Screening (Terminal Integrity)</b>            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 &lt;1% white colonies.</p>	Pass
<p><b>Non-Specific DNase Activity (16 hour)</b>            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><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in NEBuffer 1.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 50 units of Agel incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass

Assay Name/Specification	Lot # 10010529
<p><b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of Lambda DNA with Agel, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, &gt;95% can be recut with Agel.</p>	<p><b>Pass</b></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  
19 Jun 2018