

New England Biolabs Certificate of Analysis

Product Name: Agel-HF®
Catalog Number: R3552S
Concentration: 20,000 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: 10077396
Expiration Date: 11/2021
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R3552S/L v1.0

Agel-HF® Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3552SVIAL	Agel-HF®	10058799	Pass
B7204SVIAL	CutSmart® Buffer	10075569	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10074634	Pass

Assay Name/Specification	Lot # 10077396
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 units of Agel-HF™ incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Blue-White Screening (Terminal Integrity) A sample of LITMUS28i vector linearized with a 10-fold excess of Agel-HF™, 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 CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of Agel-HF™ incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with Agel-HF™, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated	Pass

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fragments, >95% can be recut with Agel-HF™.	

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



Penghua Zhang
Production Scientist
30 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
30 Jun 2020