

New England Biolabs Certificate of Analysis

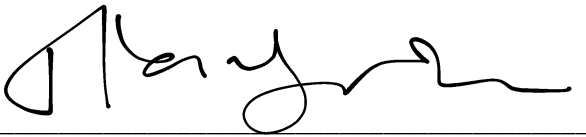
Product Name: Agel-HF®
Catalog Number: R3552S
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction of 50 µl.
Lot Number: 10052524
Expiration Date: 05/2021
Storage Temperature: -20°C
Storage 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®	10044825	Pass
B7204SVIAL	CutSmart® Buffer	10046081	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10043910	Pass

Assay Name/Specification	Lot # 10052524
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 fragments, >95% can be recut with Agel-HF™.	Pass
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	Pass

Assay Name/Specification	Lot # 10052524
for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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



Jianying Luo
Production Scientist
16 May 2019



Jay Minichiello
Packaging Quality Control Inspector
27 Aug 2019