

New England Biolabs Certificate of Analysis

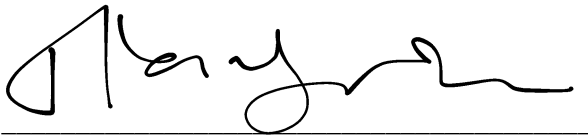
Product Name: Agel-HF[®]
Catalog Number: R3552S
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction of 50 µl.
Lot Number: 10031768
Expiration Date: 11/2020
Storage Temperature: -20°C
Storage 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 [®] | 10028839 | Pass |
| B7204SVIAL | CutSmart [®] Buffer | 10021125 | Pass |
| B7024SVIAL | Gel Loading Dye, Purple (6X) | 10021132 | Pass |

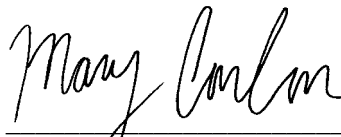
| Assay Name/Specification | Lot # 10031768 |
|--|----------------|
| Blue-White Screening (Terminal Integrity) A sample of LITMUS28i vector linearized with a 10-fold excess of Agel-HF [™] , religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies. | 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 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 | Pass |

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|--|----------------|
| of detectable nuclease degradation as determined by agarose gel electrophoresis. | |

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



Jianying Luo
Production Scientist
14 Dec 2018



Mary Conlon
Packaging Quality Control Inspector
14 Dec 2018