

## New England Biolabs Certificate of Analysis

**Product Name:** Agel-HF®  
**Catalog Number:** R3552L  
**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:** 10143370  
**Expiration Date:** 03/2024  
**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 |
| R3552LVIAL              | Agel-HF®                     | 10143367   | Pass                 |
| B7024AVIAL              | Gel Loading Dye, Purple (6X) | 10138405   | Pass                 |
| B6004SVIAL              | rCutSmart™ Buffer            | 10138403   | Pass                 |

| Assay Name/Specification   | Lot # 10143370 |
|--|----------------|
| <p><b>Non-Specific DNase Activity (16 Hour)</b><br/>           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.</p> | Pass           |
| <p><b>Ligation and Recutting (Terminal Integrity)</b><br/>           After a 20-fold over-digestion of Lambda DNA with Agel-HF™, &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-HF™.</p>                                   | Pass           |
| <p><b>Exonuclease Activity (Radioactivity Release)</b><br/>           A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 200 units of Agel-HF™ incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>   | Pass           |
| <p><b>Blue-White Screening (Terminal Integrity)</b><br/>           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</p>  | Pass           |

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|--------------------------------|----------------|
| results in <1% white colonies. |                |

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



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