

New England Biolabs Certificate of Analysis

Product Name: Hgal
Catalog Number: R0154L
Concentration: 2,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of PhiX174 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10061180
Expiration Date: 12/2021
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-R0154S/L v1.0

| Hgal Component List | | | |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0154LVIAL | Hgal | 10061179 | Pass |
| B7201SVIAL | NEBuffer™ 1.1 | 10043905 | Pass |

| Assay Name/Specification | Lot # 10061180 |
|---|----------------|
| <p>Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of PhiX174 DNA with Hgal, >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 Hgal.</p> | Pass |
| <p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 2 units of Hgal incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.</p> | Pass |
| <p>Protein Purity Assay (SDS-PAGE) Hgal is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p> | Pass |
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 1.1 containing 1 µg of PhiX174 DNA and a minimum of 2 Units of Hgal 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 |

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



Penghua Zhang
Production Scientist
06 Dec 2019



Michael Tonello
Packaging Quality Control Inspector
04 Mar 2020