

New England Biolabs Certificate of Analysis

Product Name: Hgal
Catalog Number: R0154S
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: 10091767
Expiration Date: 10/2022
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
R0154SVIAL	Hgal	10083534	Pass
B7201SVIAL	NEBuffer™ 1.1	10090429	Pass

Assay Name/Specification	Lot # 10091767
<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>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>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
<p>Protein Purity Assay (SDS-PAGE) Hgal is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

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

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Production Scientist
24 Nov 2020



Josh Hersey
Packaging Quality Control Inspector
24 Nov 2020