

New England Biolabs Certificate of Analysis

Product Name: HindIII-HF®
Catalog Number: R3104T
Concentration: 100,000 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 volume of 50 µl.
Packaging Lot Number: 10091206
Expiration Date: 09/2022
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R3104T/M v1.0

| HindIII-HF® Component List | | | |
|----------------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R3104TVIAL | HindIII-HF® | 10082130 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10089399 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10084973 | Pass |

| Assay Name/Specification | Lot # 10091206 |
|---|----------------|
| Endonuclease Activity (Nicking) A 50 µl reaction in 50 µl PhiX174 NEBuffer 4 60 1 µg HindIII-HF™ PhiX174 37 60 units% conversion to the nicked form as determined by agarose gel electrophoresis. incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis. | 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 HindIII-HF™ incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 100-fold over-digestion of Lambda DNA with HindIII-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 HindIII-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 | Pass |

| Assay Name/Specification | Lot # 10091206 |
|--|--------------------|
| <p>200 Units of HindIII-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> <p>Protein Purity Assay (SDS-PAGE) HindIII-HF™ is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p> | <p>Pass</p> |

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 for additional information.



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18 Nov 2020



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18 Nov 2020