

New England Biolabs Certificate of Analysis

Product Name: HpaII
Catalog Number: R0171L
Concentration: 10,000 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: 10138026
Expiration Date: 12/2023
Storage Temperature: -20°C
Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0171S/L v1.0

| HpaII Component List | | | |
|----------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0171LVIAL | HpaII | 10132210 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10132778 | Pass |

| Assay Name/Specification | Lot # 10138026 |
|---|----------------|
| Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with HpaII, >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 HpaII. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 50 Units of HpaII incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation 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 100 units of HpaII incubated for 4 hours at 37°C releases <0.5% of the total radioactivity. | Pass |

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

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14 Feb 2022



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14 Feb 2022