

New England Biolabs Certificate of Analysis

Product Name: HpyCH4IV
Catalog Number: R0619S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10107530
Expiration Date: 03/2023
Storage Temperature: -20°C
Storage Conditions: 100 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-R0619S/L v1.0

| HpyCH4IV Component List | | | |
|-------------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0619SVIAL | HpyCH4IV | 10102171 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10107576 | Pass |

| Assay Name/Specification | Lot # 10107530 |
|--|----------------|
| 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 30 units of HpyCH4IV incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pUC19 DNA with HpyCH4IV, >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 HpyCH4IV. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart Buffer containing 1 µg of pUC19 DNA and a minimum of 30 units of HpyCH4IV incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| Protein Purity Assay (SDS-PAGE) HpyCH4IV is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. | Pass |

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.



Pengda Zhang
Production Scientist
02 Jun 2021



Michael Tonello
Packaging Quality Control Inspector
02 Jun 2021