

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.
Lot Number: 10052730
Expiration Date: 07/2021
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	10050206	Pass
B7204SVIAL	CutSmart® Buffer	10050275	Pass

Assay Name/Specification	Lot # 10052730
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.



Stephanie Cornelio

Stephanie Cornelio
Production Scientist
22 Jul 2019

Jay Minichiello

Jay Minichiello
Packaging Quality Control Inspector
13 Sep 2019