240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
Fax 978-921-1350
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New England Biolabs
Certificate of Analysis

Product Name:	*HpyCH4IV*
Catalog Number:	*R0619L*
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:	*10234168*
Expiration Date:	*01/2026*
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
R0619LVIAL	HpyCH4IV	10225985	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10233338	**Pass**

Assay Name/Specification	Lot # 10234168
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 37ºC 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 16ºC. 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 37ºC 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.

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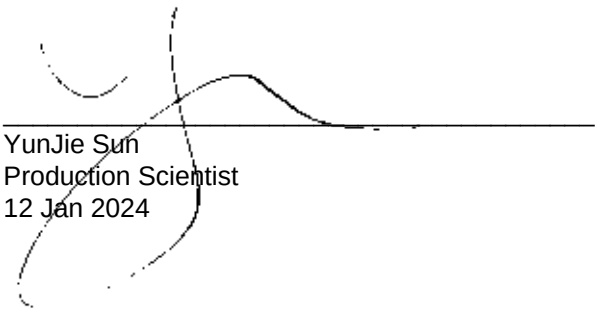

YunJie Sun
Production Scientist
12 Jan 2024

Michael Tonello
Packaging Quality Control Inspector
09 Apr 2024