

New England Biolabs Certificate of Analysis

Product Name: HpaII
Catalog Number: R0171M
Concentration: 50,000 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: 10079010
Expiration Date: 03/2022
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-R0171M v1.0

HpaII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0171MVIAL	HpaII	10068212	Pass
B7204SVIAL	CutSmart® Buffer	10075570	Pass

Assay Name/Specification	Lot # 10079010
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
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

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



Mala Samaranayake
Production Scientist
16 Jul 2020



Josh Hersey
Packaging Quality Control Inspector
16 Jul 2020