

New England Biolabs Certificate of Analysis

Product Name: Hpy166II
Catalog Number: R0616S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 ·g of pBR322 in 1 hour at 37°C in total reaction volume of 50 ·l.
Packaging Lot Number: 10073150
Expiration Date: 04/2022
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA
Specification Version: PS-R0616S/L v1.0

Hpy166II Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0616SVIAL	Hpy166II	10073151	Pass
B7204SVIAL	CutSmart® Buffer	10074630	Pass

Assay Name/Specification	Lot # 10073150
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 Hpy166II 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 pBR322 DNA with Hpy166II, >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 Hpy166II.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBR322 DNA and a minimum of 50 units of Hpy166II 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) Hpy166II 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.



Penghua Zhang
Production Scientist
11 Jun 2020



Josh Hersey
Packaging Quality Control Inspector
11 Jun 2020