

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: 10088093
Expiration Date: 10/2022
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 | 10088094 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10085423 | Pass |

| Assay Name/Specification | Lot # 10088093 |
|--|----------------|
| 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 |
| 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 |

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

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Pengda Zhang
Production Scientist
30 Oct 2020



Michael Tonello
Packaging Quality Control Inspector
30 Oct 2020