

New England Biolabs Certificate of Analysis

Product Name: Hpy188III
Catalog Number: R0622L
Concentration: 5,000 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: 10027067
Expiration Date: 10/2020
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0622S/L v2.0

| Hpy188III Component List | | | |
|--------------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0622LVIAL | Hpy188III | 10027068 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10018444 | Pass |

| Assay Name/Specification | Lot # 10027067 |
|--|----------------|
| <p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 25 units of Hpy188III incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of pUC19 DNA with Hpy188III, ~75% 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 Hpy188III.</p> | Pass |
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pUC19 DNA and a minimum of 5 units of Hpy188III incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p> | Pass |

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



Tony Spear-Alfonso
Production Scientist
17 Sep 2018



Michael Tonello
Packaging Quality Control Inspector
01 Nov 2018