240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: Hpy188III

Catalog #: R0622S/L

Concentration: 5,000 units/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 #:
 0061211

 Assay Date:
 11/2012

 Expiration Date:
 11/2014

 Storage Temp:
 -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 v1.0
Effective Date: 01 Aug 2013

Assay Name/Specification (minimum release criteria)	Lot #0061211
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 25 units of Hpy188III incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
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.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of pUC19 DNA and a minimum of 50 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.	Pass

^{*} The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.

Authorized by Derek Robinson 01 Aug 2013







Inspected by Terry Petronzio 01 Aug 2013

Theren R. Returning