

New England Biolabs Certificate of Analysis

Product Name: Hpy166II
Catalog #: R0616S/L
Concentration: 10,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 α g of pBR322 in 1 hour at 37°C in total reaction volume of 50 α l.
Lot #: 0071411
Assay Date: 11/2014
Expiration Date: 11/2016
Storage Temp: -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 μ g/ml BSA
Specification Version: PS-R0616S/L v1.0
Effective Date: 10 Oct 2013

Assay Name/Specification (minimum release criteria)	Lot #0071411
Exonuclease Activity (Radioactivity Release) - A 50 μ l reaction in CutSmart™ Buffer containing 1 μ g of a mixture of single and double-stranded [³ H] <i>E. coli</i> 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 μ l reaction in CutSmart™ Buffer containing 1 μ g 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

* 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
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10 Oct 2013



Inspected by
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03 Dec 2014

