

New England Biolabs Certificate of Analysis

Product Name: Hpy188I
Catalog Number: R0617S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 in 1 hour at 37°C in a total reaction volume of 50 µl.
Lot Number: 10022286
Expiration Date: 09/2020
Storage Temperature: -20°C
Storage Conditions: 100 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0617S/L v1.0

Hpy188I Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0617SVIAL	Hpy188I	10022285	Pass
B7204SVIAL	CutSmart® Buffer	10021123	Pass

Assay Name/Specification	Lot # 10022286
<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 30 units of Hpy188I 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 pBR322 DNA with Hpy188I, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with Hpy188I.</p>	Pass
<p>Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBR322 DNA and a minimum of 10 units of Hpy188I incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.</p>	Pass

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



Anthony Francis
Production Scientist
24 Sep 2018



Michael Tonello
Packaging Quality Control Inspector
07 Dec 2018