NEW ENGLAND BioLabs Inc.

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drive DISCOVERY
stay GENUINE

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New England Biolabs
Certificate of Analysis

Product Name:	*Hpy188III*
Catalog Number:	*R0622S*
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:	*10027069*
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**
R0622SVIAL	Hpy188III	10027070	**Pass**
B7204SVIAL	CutSmart® Buffer	10021119	**Pass**

Assay Name/Specification	Lot # 10027069
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 37ºC 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 16ºC. Of these ligated fragments, >95% can be recut with Hpy188III.	**Pass**
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 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**

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

nqa. ISO 9001 Registered Quality Management
nqa. ISO 13485 Registered Medical Devices
nqa. ISO 14001 Registered Environmental Management

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Tony Spear-Alfonso
Production Scientist
16 Oct 2018

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Michael Tonello
Packaging Quality Control Inspector
15 Nov 2018

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