NEW ENGLAND BioLabs Inc.
be INSPIRED drive DISCOVERY stay GENUINE
240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
Fax 978-921-1350
www.neb.com
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New England Biolabs
Certificate of Analysis

Product Name:	*HpyAV*
Catalog Number:	*R0621L*
Concentration:	*2,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10149736*
Expiration Date:	*05/2024*
Storage Temperature:	*-20°C*
Storage Conditions:	*300 mM NaCl, 10 mM Tris-HCl, 0.5 mM NiSO4, 0.1 mM EDTA, 50 % Glycerol, 200 µg/ml BSA, (pH 7.4 @ 25°C)*
Specification Version:	*PS-R0621S/L v3.0*

HpyAV Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0621LVIAL	HpyAV	10149735	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10149689	**Pass**

Assay Name/Specification	**Lot # 10149736**
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 6 units of HpyAV incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 20 units of HpyAV incubated for 4 hours at 37ºC releases <0.3% of the total radioactivity.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of Lambda DNA with HpyAV, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16ºC. Of these ligated fragments, ~50% can be recut with HpyAV.	**Pass**

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

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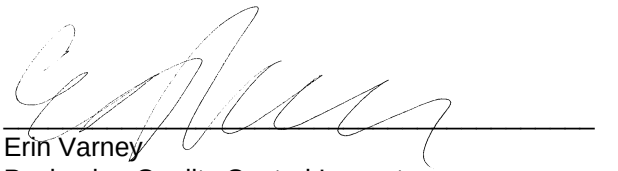
Penghua Zhang
Production Scientist
01 Jun 2022



Erin Varney
Packaging Quality Control Inspector
01 Jun 2022