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:	*ApaLI*
Catalog Number:	*R0507M*
Concentration:	*50,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (Hind III digest) in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10143596*
Expiration Date:	*03/2024*
Storage Temperature:	*-20°C*
Storage Conditions:	*50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version:	*PS-R0507T/M v1.0*

ApaLI Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0507MVIAL	ApaLI	10143594	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10143285	**Pass**

Assay Name/Specification	**Lot # 10143596**
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 100 Units of ApaLI incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with ApaLI, >95% 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 ApaLI.	**Pass**
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled M13mp19 DNA and a minimum of 50 Units of ApaLI incubated for 4 hours at 37ºC results in <10% conversion to the nicked form 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	**Pass**

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Assay Name/Specification	Lot # 10143596
double-stranded [^{3}H] E. coli DNA and a minimum of 100 units of ApaLI incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	

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

Penghua Zhang
Production Scientist
23 Mar 2022

Michael Tonello
Packaging Quality Control Inspector
23 Mar 2022