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New England Biolabs Certificate of Analysis

Product Name: ApeKI
Catalog Number: R0643L
Concentration: 5,000 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 75°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10078408
Expiration Date: 07/2022
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-R0643S/L v1.0

ApeKI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0643LVIAL	ApeKI	10078407	Pass	
B7203SVIAL	NEBuffer™ 3.1	10077593	Pass	
B7024SVIAL	Gel Loading Dye, Purple (6X)	10075962	Pass	

Assay Name/Specification	Lot # 10078408
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 15 units of ApeKI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of Lambda DNA with ApeKI, >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 ApeKI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 10 units of ApeKI incubated for 16 hours at 75°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) ApeKI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass



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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Penghaa Zhang Production Scientist

04 Aug 2020

Michael Tonello

Packaging Quality Control Inspector

04 Aug 2020