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## New England Biolabs Certificate of Analysis

Product Name: ApeKI
Catalog Number: R0643S
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: 10089954
Expiration Date: 11/2022
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				
<b>NEB Part Number</b>	<b>Component Description</b>	Lot Number	Individual QC Result	
R0643SVIAL	ApeKI	10089955	Pass	
B7203SVIAL	NEBuffer™ 3.1	10085495	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10089401	Pass	

Assay Name/Specification	Lot # 10089954
Protein Purity Assay (SDS-PAGE)  ApeKI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue	Pass
detection.	
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	Pass
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.	
Ligation and Recutting (Terminal Integrity)	Pass
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.	
Exonuclease Activity (Radioactivity Release)	Pass
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.	



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

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Penghaa Zhang Production Scientist

21 Dec 2020

Michael Tonello

Packaging Quality Control Inspector

21 Dec 2020