

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: AcII
Catalog Number: R0598S
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 37°C in a total reaction volume of 50 μl.

Lot Number: 10046933
Expiration Date: 06/2021
Storage Temperature: -20°C

Storage Conditions: 100 mM KCl , 10 mM Tris-HCl (7.4), 1 mM DTT , 0.1 mM EDTA , 50 %

Glycerol , 200 μg/ml BSA

Specification Version: PS-R0598S/L v1.0

Acll Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0598SVIAL	Acll	10046936	Pass	
B7204SVIAL	CutSmart® Buffer	10043912	Pass	

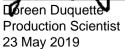
Assay Name/Specification	Lot # 10046933
<b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of Lambda DNA with AcII, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with AcII.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 15 units of Acll incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) AcII is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
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 50 units of AcII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass

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



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NEW ENGLAND

Michael Tonello

Packaging Quality Control Inspector 17 Jun 2019



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