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New England Biolabs Certificate of Analysis

Product Name: EcoNI
Catalog Number: R0521L
Concentration: 10,000 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: 10146058
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-R0521S/L v1.0

EcoNI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0521LVIAL	EcoNI	10146057	Pass	
B6004SVIAL	rCutSmart™ Buffer	10143289	Pass	

Assay Name/Specification	Lot # 10146059
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 30 Units of EcoNI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of Lambda DNA with EcoNI, ~75% 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 EcoNI.	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 30 units of EcoNI 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.

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.



R0521L / Lot: 10146059 Page 1 of 2 Penghua Zhang Production Scientist 28 Apr 2022

Erin Varney

Packaging Quality Control Inspector

28 Apr 2022

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