

New England Biolabs Certificate of Analysis

Product Name: EcoNI
Catalog Number: R0521S
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: 10071281
Expiration Date: 12/2021
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
R0521SVIAL	EcoNI	10061414	Pass
B7204SVIAL	CutSmart® Buffer	10074630	Pass

Assay Name/Specification	Lot # 10071281
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 [³ H] 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.



Penghua Zhang
Production Scientist
17 Jun 2020



Michael Tonello
Packaging Quality Control Inspector
17 Jun 2020