New England BioLabs Inc.

be INSPIRED
drive DISCOVERY
stay GENUINE

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:	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:	10091194
Expiration Date:	03/2022
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	10069738	**Pass**
B7204SVIAL	CutSmart® Buffer	10089397	**Pass**

Assay Name/Specification	Lot # 10091194
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 37⁰C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**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 37⁰C releases <0.1% of the total radioactivity.	**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 16⁰C. Of these ligated fragments, >95% can be recut with EcoNI.	**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.

_be_ INSPIRED
drive DISCOVERY
stay GENUINE

Penghua Zhang
Production Scientist
17 Nov 2020

Josh Hersey
Packaging Quality Control Inspector
17 Nov 2020