

New England Biolabs Certificate of Analysis

Product Name: EcoRI
Catalog Number: R0101M
Concentration: 100,000 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: 10019709
Expiration Date: 08/2020
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM KPO4 (pH 7.5), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA
Specification Version: PS-R0101T/M v2.0

EcoRI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0101MVIAl	EcoRI	10019710	Pass
B7024SVIAl	Gel Loading Dye, Purple (6X)	10013725	Pass
B0101SVIAl	NEBuffer™ EcoRI	0091801	Pass

Assay Name/Specification	Lot # 10019709
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in EcoRI Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of EcoRI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with EcoRI, >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 EcoRI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in EcoRI Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of EcoRI 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) EcoRI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

Assay Name/Specification	Lot # 10019709
<p>Blue-White Screening (Terminal Integrity) A sample of pUC19 vector linearized with a 10-fold excess of EcoRI, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in <1% white colonies.</p>	<p>Pass</p>

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



Tony Spear-Alfonso
Production Scientist
08 Aug 2018



Michael Tonello
Packaging Quality Control Inspector
27 Aug 2018