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: EcoRI

Catalog #: R0101T/M
Concentration: 100,000 units/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  $\mu$ l.

 Lot #:
 0341610

 Assay Date:
 10/2016

 Expiration Date:
 10/2018

 Storage Temp:
 -20°C

Storage Conditions: 300 mM NaCl, 10 mM KPO<sub>4</sub> (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

Effective Date: 21 Oct 2014

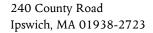
Assay Name/Specification (minimum release criteria)	Lot #0341610
<b>Blue-White Screening (Terminal Integrity)</b> - A sample of pUC19 vector linearized with a 10-fold excess of EcoRI, religated and transformed into an <i>E. coli</i> strain expressing the LacZ beta fragment gene results in <1% white colonies.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 $\mu$ l reaction in EcoRI Buffer containing 1 $\mu$ g of a mixture of single and double-stranded [ $^3$ H] <i>E. coli</i> DNA and a minimum of 200 units of EcoRI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> - 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 $\mu$ l reaction in EcoRI Buffer containing 1 $\mu$ g 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
<b>Protein Purity Assay (SDS-PAGE)</b> - EcoRI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

<sup>\*</sup> The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.

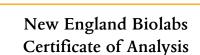








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Authorized by Derek Robinson 21 Oct 2014





NEW ENGLAND BioLabs Inc.



Inspected by Stephanie Cornelio 12 Oct 2016

Stephani Onetto