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New England Biolabs
Certificate of Analysis

Product Name:	*EcoRI Methyltransferase*
Catalog #:	*M0211S*
Concentration:	*40,000 units/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to protect 1 µg Lambda DNA in 1 hour at 37°C in a total reaction volume of 10 µl against cleavage by EcoRI restriction endonuclease.*
Lot #:	*0131802*
Assay Date:	*02/2018*
Expiration Date:	*02/2020*
Storage Temp:	*-20°C*
Storage Conditions:	*200 mM NaCl, 100 mM Potassium Phosphate, 0.1 mM EDTA, 10 mM βME, 200 µg/ml BSA, 50% Glycerol, (pH 7.4 @ 25°C)*
Specification Version:	*PS-M0211S v1.0*
Effective Date:	*18 May 2018*

Assay Name/Specification (minimum release criteria)	**Lot #0131802**
Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [^{3}H] *E. coli* DNA and a minimum of 400 units of EcoRI Methyltransferase incubated for 4 hours at 37°C releases <0.3% of the total radioactivity.	**Pass**
Functional Testing (Methyltransferase) - A 10 µl reaction in EcoRI Methyltransferase Reaction Buffer supplemented with 80 µM SAM containing 1 µg of Lambda DNA and 1 unit of EcoRI Methyltransferase incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 5 units of EcoRI in NEBuffer 2 incubated at 37°C for 30 minutes as determined by agarose gel electrophoresis.	**Pass**
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 2 containing 1 µg of Lambda-HindIII DNA and a minimum of 400 units of EcoRI Methyltransferase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**

Authorized by
Derek Robinson
18 May 2018

Inspected by
Timothy Meixsell
13 Feb 2018

nqa ISO 9001 Registered Quality Management
nqa ISO 14001 Registered Environmental Management
nqa ISO 13485 Registered Medical Devices