

New England Biolabs Certificate of Analysis

Product Name: *EcoRI Methyltransferase*

Catalog Number: M0211S

Concentration: 40,000 U/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 rCutSmart™ Buffer in a total reaction volume of 10 µl against cleavage by EcoRI restriction endonuclease.

Packaging Lot Number: 10121432

Expiration Date: 10/2023

Storage Temperature: -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 v2.0

EcoRI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0211SVIAL	EcoRI Methyltransferase	10121431	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10124322	Pass
B6004SVIAL	rCutSmart™ Buffer	10121394	Pass

Assay Name/Specification	Lot # 10121432
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in rCutSmart™ Buffer 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.</p>	Pass
<p>Functional Testing (Methyltransferase) A 10 µl reaction in rCutSmart™ 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 10</p>	Pass

Assay Name/Specification	Lot # 10121432
units of EcoRI in rCutSmart™ Buffer incubated at 37°C for 30 minutes as determined by agarose gel electrophoresis.	

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

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Production Scientist
06 Dec 2021



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06 Dec 2021