

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: 10165493

Expiration Date: 08/2024

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	10156841	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10157973	Pass
B6004SVIAL	rCutSmart™ Buffer	10161524	Pass

Assay Name/Specification	Lot # 10165493
<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>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 units of EcoRI in rCutSmart™ Buffer incubated at 37°C for 30 minutes as determined by agarose gel electrophoresis.</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</p>	Pass

Assay Name/Specification	Lot # 10165493
results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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.



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Production Scientist
09 Aug 2022



Michael Tonello
Packaging Quality Control Inspector
19 Oct 2022