

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: *10225042*
Expiration Date: *01/2026*
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	10225041	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10210241	Pass
B6004SVIAL	rCutSmart™ Buffer	10224839	Pass

Assay Name/Specification	Lot # 10225042
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer 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 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.	Pass
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	Pass

Assay Name/Specification	Lot # 10225042
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.



Nicole Castagnozzi
Production Scientist
25 Jan 2024



Michael Tonello
Packaging Quality Control Inspector
29 Jan 2024