

## 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 a total reaction volume of 10 µl against cleavage by EcoRI restriction endonuclease.  
**Lot Number:** 10038542  
**Expiration Date:** 02/2021  
**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 v1.0

EcoRI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0211SVIAL	EcoRI Methyltransferase	10038526	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10035983	Pass
B0211SVIAL	EcoRI Methyltransferase Reaction Buffer	10013420	Pass

Assay Name/Specification	Lot # 10038542
<b>Non-Specific DNase Activity (16 Hour)</b> 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
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> 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
<b>Functional Testing (Methyltransferase)</b> 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	Pass

Assay Name/Specification	Lot # 10038542
determined by agarose gel electrophoresis.	

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



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Tim Meixsell  
Production Scientist  
22 Aug 2018



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Michael Tonello  
Packaging Quality Control Inspector  
25 Mar 2019