

## 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.*  
**Packaging Lot Number:** *10056505*  
**Expiration Date:** *09/2021*  
**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	10054603	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10061033	Pass
B0211SVIAL	EcoRI Methyltransferase Reaction Buffer	10064171	Pass

Assay Name/Specification	Lot # 10056505
<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 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>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	Pass

Assay Name/Specification	Lot # 10056505
electrophoresis.	

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



Tim Meixsell  
Production Scientist  
23 Sep 2019



Michael Tonello  
Packaging Quality Control Inspector  
08 Jan 2020