

## New England Biolabs Certificate of Analysis

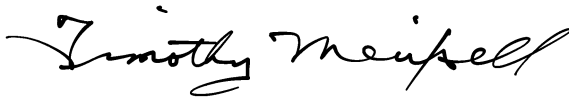
**Product Name:** *AluI Methyltransferase*  
**Catalog Number:** *M0220S*  
**Concentration:** *5,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to protect 1 µg Lambda DNA in 1 hour at 37°C in a total reaction volume of 10 µl against cleavage by AluI restriction endonuclease.*  
**Packaging Lot Number:** *10065601*  
**Expiration Date:** *08/2021*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *10 mM Tris-HCl , 50 mM KCl , 1 mM DTT , 0.1 mM EDTA , 200 µg/ml BSA , 50 % Glycerol, (pH 7.4 @ 25°C)*  
**Specification Version:** *PS-M0220S v1.0*

AluI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0220SVIAL	AluI Methyltransferase	10052774	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10070537	Pass
B0220SVIAL	AluI Methyltransferase Reaction Buffer	10039366	Pass

Assay Name/Specification	Lot # 10065601
<p><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 50 units of AluI Methyltransferase incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Functional Testing (Methyltransferase)</b>            A 10 µl reaction in AluI Methyltransferase Reaction Buffer supplemented with 80 µM SAM containing 1 µg of Lambda DNA and 1 unit of AluI Methyltransferase incubated for 1 hour at 37°C followed by heat inactivation results in ≥ 95% protection from digestion with 10 units of AluI in NEBuffer 1 with 10 mM MgCl<sub>2</sub> incubated at 37°C for 30 minutes as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in NEBuffer 2 containing 1 µg of Lambda DNA and a minimum of 50 units of AluI Methyltransferase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel</p>	Pass

Assay Name/Specification	Lot # 10065601
electrophoresis.	

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



Timothy Meixsell  
Production Scientist  
21 Jul 2020



Michael Tonello  
Packaging Quality Control Inspector  
21 Jul 2020