

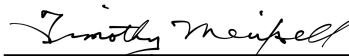
## New England Biolabs Certificate of Analysis

*Product Name:* AluI Methyltransferase  
*Catalog #:* M0220S  
*Concentration:* 5,000 units/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.  
*Lot #:* 0081803  
*Assay Date:* 03/2018  
*Expiration Date:* 03/2020  
*Storage Temp:* -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  
*Effective Date:* 16 May 2018

Assay Name/Specification (minimum release criteria)	Lot #0081803
<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] <i>E. coli</i> DNA and a minimum of 50 units of AluI Methyltransferase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<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.	<b>Pass</b>
<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 electrophoresis.	<b>Pass</b>



Authorized by  
Derek Robinson  
16 May 2018



Inspected by  
Timothy Meixsell  
02 Mar 2018

