

## 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:** 10084144  
**Expiration Date:** 03/2022  
**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

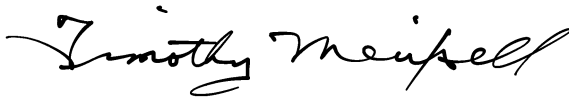
AluI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0220SVIAL	AluI Methyltransferase	10084145	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10079763	Pass
B0220SVIAL	AluI Methyltransferase Reaction Buffer	10039366	Pass

Assay Name/Specification	Lot # 10084144
<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.	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 50 units of AluI Methyltransferase incubated for 4 hours at 37°C releases <0.1% 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 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	Pass

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electrophoresis.	

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

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02 Oct 2020



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Packaging Quality Control Inspector  
02 Oct 2020