

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: *10245565*
Expiration Date: *06/2026*
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	10245563	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10233985	Pass
B0220SVIAL	AluI Methyltransferase Reaction Buffer	10245566	Pass

Assay Name/Specification	Lot # 10245565
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>Functional Testing (Methyltransferase) 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 MgCl₂ incubated at 37°C for 30 minutes as determined by agarose gel electrophoresis.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) 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 # 10245565
electrophoresis.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



 Nicole Castagnozzi
 Production Scientist
 21 Jun 2024



 Michael Tonello
 Packaging Quality Control Inspector
 08 Jul 2024