

## New England Biolabs Certificate of Analysis

**Product Name:** *TaqI Methyltransferase*  
**Catalog Number:** *M0219S*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to protect 1 µg Lambda DNA in 1 hour at 65°C in a total reaction volume of 20 µl against cleavage by TaqI restriction endonuclease.*  
**Lot Number:** *10051832*  
**Expiration Date:** *04/2021*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *100 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 200 µg/ml BSA, (pH 7.4 @ 25°C)*  
**Specification Version:** *PS-M0219S v1.0*

TaqI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0219SVIAL	TaqI Methyltransferase	10038660	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10049759	Pass
B7204SVIAL	CutSmart® Buffer	10043347	Pass

Assay Name/Specification	Lot # 10051832
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in NEBuffer 2 containing 1 µg of BstEII digested Lambda DNA and a minimum of 100 units of TaqI Methyltransferase incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<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 100 units of TaqI Methyltransferase incubated for 4 hours at 65°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Functional Testing (Methyltransferase)</b>            A 20 µl reaction in CutSmart® Buffer supplemented with 80 µM SAM containing 1 µg of Lambda DNA and 1 unit of TaqI Methyltransferase incubated for 1 hour at 65°C followed by heat inactivation results in ≥ 95% protection from digestion with 10 units of TaqI in CutSmart® Buffer incubated at 65°C for 15 minutes as determined by</p>	Pass

Assay Name/Specification	Lot # 10051832
agarose gel electrophoresis.	

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



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Tim Meixsell  
Production Scientist  
29 Mar 2019



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Michael Tonello  
Packaging Quality Control Inspector  
31 Jul 2019