

New England Biolabs Certificate of Analysis

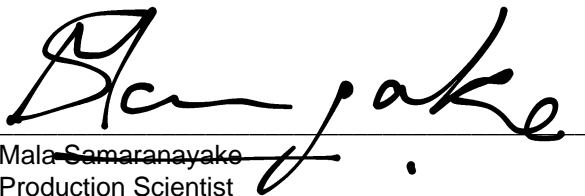
Product Name: *HpaII Methyltransferase*
Catalog Number: *M0214S*
Concentration: *4,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to protect 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl against cleavage by HpaII restriction endonuclease.*
Packaging Lot Number: *10068166*
Expiration Date: *03/2021*
Storage Temperature: *-20°C*
Storage Conditions: *150 mM NaCl, 50 mM Tris-HCl, 0.1 mM EDTA, 5 mM TCEP-HCl, 50 % Glycerol, 200 µg/ml BSA, (pH 7.5 @ 25°C)*
Specification Version: *PS-M0214S/L v2.0*

HpaII Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0214SVIAL	HpaII Methyltransferase	10068166	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10070537	Pass
B7204SVIAL	CutSmart® Buffer	10075569	Pass

Assay Name/Specification	Lot # 10068166
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 40 units of HpaII Methyltransferase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Methylase Activity (dam Methylase) A 20 µl reaction in CutSmart® Buffer supplemented with 80 µM S-adenosylmethionine containing 1 µg Lambda DNA and a minimum of 40 units of HpaII Methyltransferase incubated for 4 hours at 37°C did not protect the DNA from digestion by MboI as determined by agarose gel electrophoresis.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of HaeIII digested PhiX174 RF I DNA and a minimum of 40 units of HpaII Methyltransferase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass

Assay Name/Specification	Lot # 10068166
<p>Protein Purity Assay (SDS-PAGE) HpaII Methyltransferase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of HpaII Methyltransferase is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass

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



Mala Samaranayake
Production Scientist
08 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
08 Jul 2020