

## New England Biolabs Certificate of Analysis

**Product Name:** *HhaI Methyltransferase*  
**Catalog Number:** *M0217S*  
**Concentration:** *25,000 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 30 µl against cleavage by HhaI restriction endonuclease.*  
**Lot Number:** *10014312*  
**Expiration Date:** *07/2019*  
**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-M0217S/L v1.0*

HhaI Methyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0217SVIAL	HhaI Methyltransferase	10014313	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10008707	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	0231804	Pass

Assay Name/Specification	Lot # 10014312
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 250 units of HhaI Methyltransferase incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Methylase Activity (dam Methylase)</b>            A 20 µl reaction in CutSmart® Buffer supplemented with 80 µM S-adenosylmethionine containing 1 µg Lambda DNA and a minimum of 250 units of HhaI 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><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in CutSmart® Buffer containing 1 µg of PhiX174-HaeIII DNA and a minimum of 125 units of HhaI 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

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

*Ben Pent*

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Ben Penta  
Production Scientist  
06 Jun 2018

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
13 Jul 2018