

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>HhaI Methyltransferase</i>
<i>Catalog #:</i>	<i>M0217S/L</i>
<i>Concentration:</i>	<i>25,000 units/ml</i>
<i>Unit Definition:</i>	<i>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.</i>
<i>Shelf Life:</i>	<i>12 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>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)</i>
<i>Specification Version:</i>	<i>PS-M0217S/L v1.0</i>
<i>Effective Date:</i>	<i>06 Apr 2018</i>

### Assay Name/Specification (minimum release criteria)

**Exonuclease Activity (Radioactivity Release)** - 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 <0.1% of the total radioactivity.

**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 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.

**Non-Specific DNase Activity (16 Hour)** - 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.



Date 06 Apr 2018

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