

## New England Biolabs Certificate of Analysis

**Product Name:** *Histone H3.3 Human, Recombinant*  
**Catalog #:** *M2507S*  
**Concentration:** *1 mg/ml*  
**Unit Definition:** *N/A*  
**Lot #:** *0021712*  
**Assay Date:** *12/2017*  
**Expiration Date:** *12/2019*  
**Storage Temp:** *-20°C*  
**Storage Conditions:** *300 mM NaCl, 20 mM NaPO<sub>4</sub>, 1 mM DTT, 1 mM EDTA, (pH 7.0 @ 25°C)*  
**Specification Version:** *PS-M2507S v1.0*  
**Effective Date:** *25 Sep 2017*

Assay Name/Specification (minimum release criteria)	Lot #0021712
<b>Endonuclease Activity (Nicking)</b> - A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 RF I DNA and a minimum of 10 µg of Histone H3.3 Human, Recombinant incubated for 4 hours at 37°C results in <10% conversion to RFII as determined by agarose gel electrophoresis.	<b>Pass</b>
<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] <i>E. coli</i> DNA and a minimum of 10 µg of Histone H3.3 Human, Recombinant incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<b>Molecular Weight Determination (Mass Spectrometry)</b> - The molecular weight of Histone H3.3 Human, Recombinant is between 15,195.91 and 15,197.99 as determined by mass spectrometry analysis.	<b>Pass</b>
<b>Protease Activity (Histones)</b> - A 12 µl reaction containing 7 µl of a standard mixture of proteins and a minimum of 5 µg of Histone H3.3 Human, Recombinant incubated for 4 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> - Histone H3.3 Human, Recombinant is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<b>Pass</b>



Authorized by  
Derek Robinson  
25 Sep 2017



Inspected by  
Fana Mersha  
01 Dec 2017

