

## New England Biolabs Certificate of Analysis

**Product Name:** *Histone H3.3 Human Recombinant*  
**Catalog Number:** *M2507S*  
**Concentration:** *1 mg/ml*  
**Unit Definition:** *N/A*  
**Packaging Lot Number:** *10204821*  
**Expiration Date:** *08/2025*  
**Storage Temperature:** *-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 v2.0*

Histone H3.3 Human Recombinant Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M2507SVIAL	Histone H3.3 Human, Recombinant	10201427	Pass

Assay Name/Specification	Lot # 10204821
<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] E. coli 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 15,195.53 and 15,197.72 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	<b>Pass</b>

Assay Name/Specification	Lot # 10204821
using Coomassie Blue detection.	

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

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Fana Mersha  
Production Scientist  
08 Aug 2023



Michael Tonello  
Packaging Quality Control Inspector  
15 Aug 2023