

## New England Biolabs Certificate of Analysis

**Product Name:** Histone H3.1 Human Recombinant  
**Catalog Number:** M2503S  
**Concentration:** 1 mg/ml  
**Unit Definition:** N/A  
**Packaging Lot Number:** 10208777  
**Expiration Date:** 09/2025  
**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-M2503S v2.0


Histone H3.1 Human Recombinant Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M2503SVIAL	Histone H3.1 Human, Recombinant	10206282	Pass

Assay Name/Specification	Lot # 10208777
<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 H3.1 Human, Recombinant incubated for 4 hours at 37°C results in <10% conversion to RFII as determined by agarose gel electrophoresis.	Pass
<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 H3.1 Human, Recombinant incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Molecular Weight Determination (Mass Spectrometry)</b> The molecular weight of Histone H3.1 Human, Recombinant is between 15,271.71 and 15,273.89 as determined by mass spectrometry analysis.	Pass
<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 H3.1 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.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> Histone H3.1 Human, Recombinant is ≥ 95% pure as determined by SDS-PAGE analysis	Pass

Assay Name/Specification	Lot # 10208777
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  
30 Aug 2023



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Josh Hersey  
Packaging Quality Control Inspector  
04 Oct 2023