

## 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:** 10086522  
**Expiration Date:** 11/2022  
**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 v1.0


Histone H3.1 Human Recombinant Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M2503SVIAL	Histone H3.1 Human, Recombinant	10086523	Pass

Assay Name/Specification	Lot # 10086522
<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 15,272.31 and 15,274.39 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 # 10086522
using Coomassie Blue detection.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

  
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22 Nov 2020

  
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22 Nov 2020