

## New England Biolabs Certificate of Analysis

**Product Name:** *Histone H2A Human Recombinant*  
**Catalog Number:** *M2502S*  
**Concentration:** *1 mg/ml*  
**Unit Definition:** *N/A*  
**Lot Number:** *10013977*  
**Expiration Date:** *06/2020*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *300 mM NaCl, 20 mM NaPO<sub>4</sub>, 1 mM EDTA, (pH 7.0 @ 25°C)*  
**Specification Version:** *PS-M2502S v1.0*

Histone H2A Human Recombinant Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M2502SVIAL	Histone H2A Human, Recombinant	10013731	Pass


Assay Name/Specification	Lot # 10013977
<b>Protein Purity Assay (SDS-PAGE)</b> Histone H2A Human, Recombinant is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<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 H2A 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>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 H2A 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>Molecular Weight Determination (Mass Spectrometry)</b> The molecular weight of Histone H2A Human, Recombinant is between 13,989.68 and 13,991.76 as determined by mass spectrometry analysis.	<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 H2A Human,	<b>Pass</b>

Assay Name/Specification	Lot # 10013977
Recombinant incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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



Fana Mersha  
Production Scientist  
21 Jun 2018



Michael Tonello  
Packaging Quality Control Inspector  
21 Jun 2018