240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: Histone H3.1 Human, Recombinant

Catalog #: M2503SConcentration: 1 mg/mlUnit Definition: N/ALot #: 0051804Assay Date: 04/2018Expiration Date: 04/2020Storage Temp:  $-20^{\circ}C$ 

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 Effective Date: 22 Sep 2017

Assay Name/Specification (minimum release criteria)	Lot #0051804
<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 $\mu$ l reaction in NEBuffer 2 containing 1 $\mu$ g of a mixture of single and double-stranded [ $^3$ H] <i>E. coli</i> DNA and a minimum of 10 $\mu$ g 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
Protease Activity (Histones) - A 12 $\mu$ l reaction containing 7 $\mu$ l of a standard mixture of proteins and a minimum of 5 $\mu$ g 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 using Coomassie Blue detection.	Pass

Authorized by Derek Robinson 22 Sep 2017

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ISO 9001
Registered
Quality





Inspected by Fana Mersha 04 Apr 2018

Lana Mersha