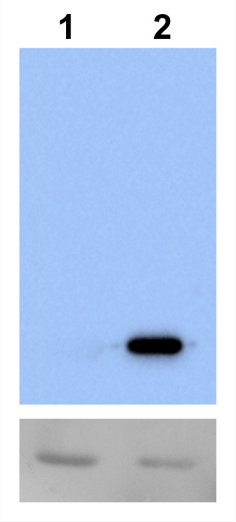
Recombinant Human Nucleosome, H3K4me1 dNuc, Biotinylated

Cat. No. NUC-012 **Lot. No.** (See product label)

SPECIFICATION

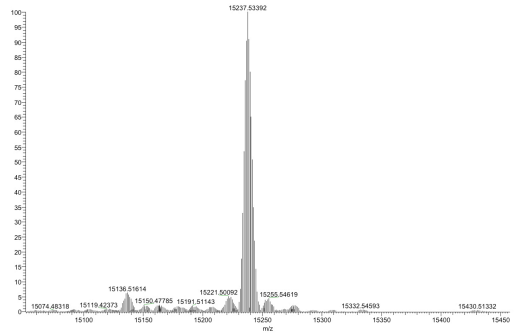
Product Overview	Mononucleosomes assembled from recombinant human histones expressed in E. coli.
Species	Human
Source	E.coli
Description	Mononucleosomes assembled from recombinant human histones expressed in E. coli (two each of histones H2A, H2B, H3 and H4; accession numbers: H2A-P04908; H2B-O60814; H3.2-Q71DI3 *; H4-P62805) wrapped by 147 base pairs of 601 positioning sequence DNA. Histone H3 (created by a proprietary semi-synthetic method) contains trimethyl-lysine at position 4. The nucleosome is the basic subunit of chromatin. The 601 sequence, identified by Lowary and Widom, is a 147-base pair sequence that has high affinity for histone octamers and is useful for nucleosome assembly and contains a 5' biotin-TEG group.
Form	Nucleosome, Recombinant Human, H3K4me1 (50 µg total mass, DNA+protein, 27.3 µg protein weight) in 10mM Tris HCl, pH 7.5, 25mM NaCl, 1mM EDTA, 2mM DTT, 20% glycerol.
Molecular Mass	200,620 Da
Applications	Nucleosome, Recombinant Human, H3K4me1 are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding

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	experiments.
Storage	Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.
Conjugation	Biotin
Western Blot Data of NUC-012	 Western Analysis of Nucleosome, Recombinant Human, H3K4me1. Top Panel: Unmodified H3 (Lane 1) and H3K4me1 containing nucleosomes (Lane 2) were probed with an anti-H3K4me1 antibody and analyzed via ECL readout. Only the H3K4me1 sample produced a detectable signal. Bottom Panel: Detail from Coomassie stained gel showing rH3 protein (Lane 1) and H3K4me1 octamer (Lane 2).

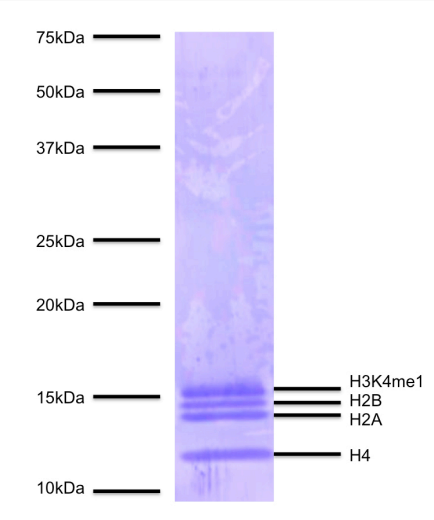
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Mass Spec Data of NUC-012



Synthetic H3K4me1 protein analyzed by ESI-TOF mass spectrometry. Expected mass = 15,238 Da. Determined mass = 15,237.5 Da.

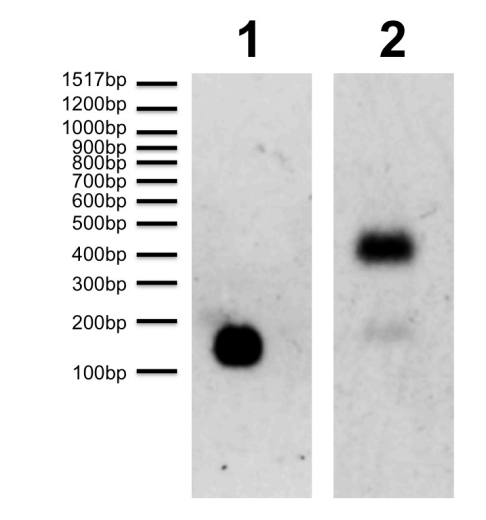
Protein Gel Data of NUC-012



Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H3K4me1 (1 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3K4me1 and H4) are indicated.

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DNA Gel Data of NUC-012



Nucleosome, Recombinant Human, H3K4me1 run on an agarose gel and stained with ethidium bromide to visualize DNA. Lane 1: Free DNA extracted from nucleosomes (200 ng). Lane 2: Intact nucleosomes (400 ng).

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