

Nucleosome, Recombinant Human, H3K4,9,14,18ac dNuc Biotinylated

Catalog No. 16-0336

Lot No. 21147004-62

Pack Size 50 µg

Product 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 acetyl-lysine at positions 4, 9, 14, and 18. The nucleosome is the basic subunit of chromatin. The 147 bp 601 sequence, identified by Lowary and Widom, has high affinity for histone octamers and is useful for nucleosome assembly. The DNA contains a 5' biotin-TEG group. * H3K4,9,14,18ac contains a Cys to Ala substitution at position 110.

Formulation:

Nucleosome, Recombinant Human, H3K4,9,14,18ac (27.3 µg protein weight, 50 µg total weight) in 51.3 µL of 10 mM Tris HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 4.85 µM. MW = 200,644 Da.

Storage and Stability:

Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

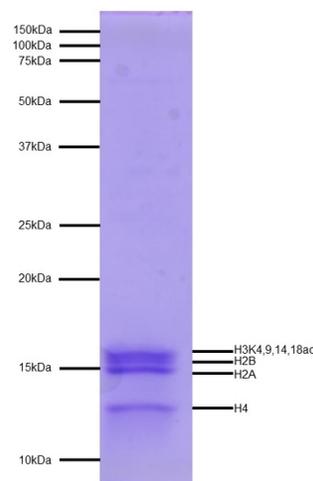
H3K4,9,14,18ac dNuc is highly purified and suitable for a variety of applications, including use as a substrate in enzymatic assays or for effector protein binding experiments.

References:

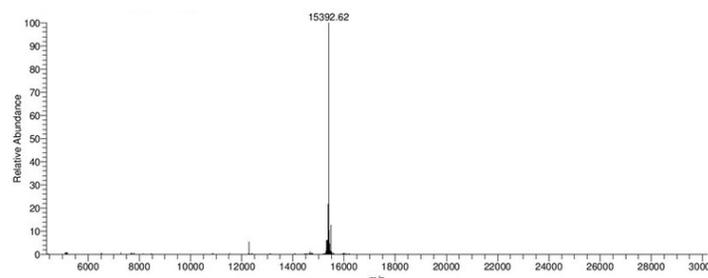
Lowary PT and J Widom (1998). *J Mol Biol* 276: 19-42.
Luger K et al (1999). *Methods Mol Biol* 119: 1-16.



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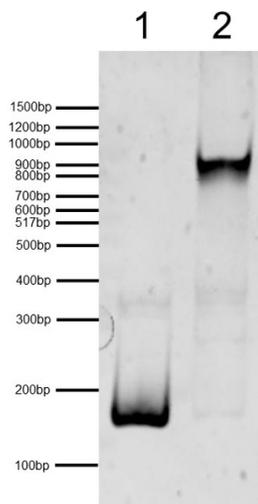


Protein Gel Data: Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H3K4,9,14,18ac (1 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3K4,9,14,18ac and H4) are indicated.



Mass Spec Data: Synthetic H3K4,9,14,18ac histone analyzed by Nanospray-LTQ Orbitrap mass spectrometry. Expected mass = 15392.77 Da. Determined mass = 15,392.62 Da.

This product is for *in vitro* research use only and is not intended for use in humans or animals.



DNA Gel Data: Nucleosome, Recombinant Human, H3K4,9,14,18ac resolved via native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Intact H3K4,9,14,18ac nucleosomes (400 ng).

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