

Nucleosome, Recombinant Human, H3K4,9,14,18ac/H4K5,8,12,16ac dNuc, Biotinylated



EpiCypher®

Catalog No. 16-0374

Lot No. 21068002-04

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. Histones (created by proprietary semi-synthetic methods) contain acetyl-lysine at H3 positions 4, 9, 14, and 18 and H4 positions 5, 8, 12, and 16. 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 has a Cys to Ala substitution at position 110.

Formulation:

H3K4,9,14,18ac/H4K5,8,12,16ac dNuc (27.3 µg protein weight, 50 µg total weight) in 45.4 µL of 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 5.49 µM. MW = 200,543 Da.

Storage and Stability:

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

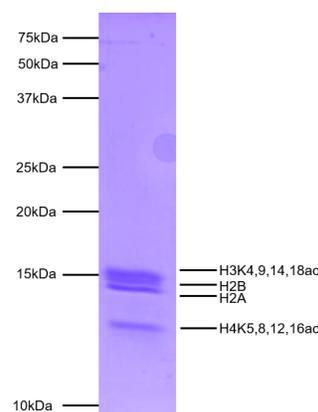
Application Notes:

H3K4,9,14,18ac/H4K5,8,12,16ac 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.

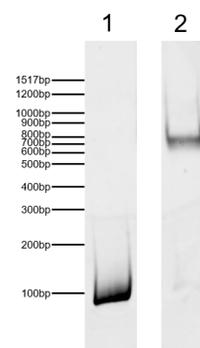
References:

Lowary PT and J Widom (1998). *J Mol Biol* 276: 19-42.

Luger K et al (1999). *Methods Mol Biol* 119: 1-16.

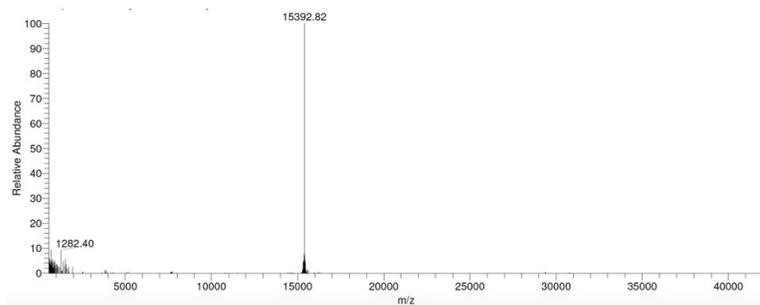


Protein Gel Data: Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H3K4,9,14,18ac/H4K5,8,12,16ac (1 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3K4,9,14,18ac and H4K5,8,12,16ac) are indicated.

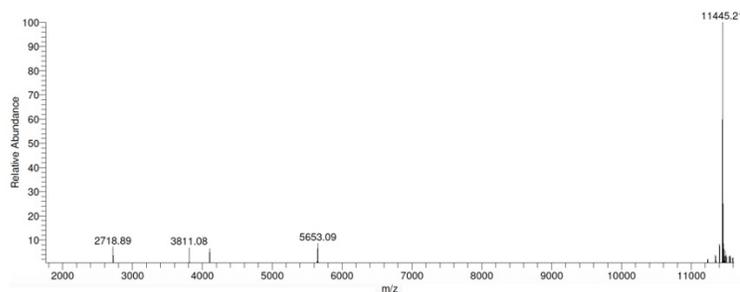


DNA Gel Data: Nucleosome, Recombinant Human, H3K4,9,14,18ac/H4K5,8,12,16ac run on a native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Intact nucleosomes (400 ng).

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



Mass Spec Data: H3.2K4,9,14,18ac protein analyzed by high resolution mass spectrometry. Expected mass = 15,392.8 Da. Determined mass = 15,392.82 Da.



Mass Spec Data: H4K5,8,12,16ac protein analyzed by high resolution mass spectrometry. Expected mass = 11,446.0 Da. Determined mass = 11,445.21 Da.

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