Nucleosome, Recombinant Human, H3K14ub dNuc, Biotinylated

Catalog No. 16-0391
Lot No. 19282001-41
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; H3.1-P68431*; H4-P62805) wrapped by 147 base pairs of 601 positioning sequence DNA. Histone H3 (created by a proprietary synthetic method) contains monoubiquitinated lysine at position 14. 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. *H3.1 contains cystein to alanine substitutions at positions 96 and 110.

Formulation:

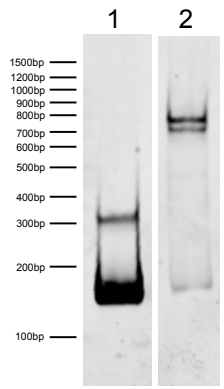
Nucleosome, Recombinant Human, H3K14ub (28.7 µg protein weight, 50 µg DNA+protein) in 59.5 µL 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol.
Molarity = 3.91 µmolar. MW = 214815 Da

Storage and Stability:

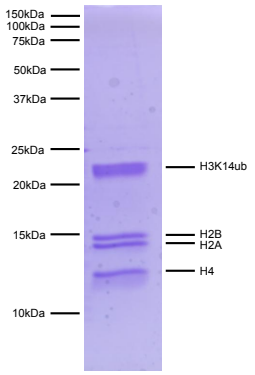
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

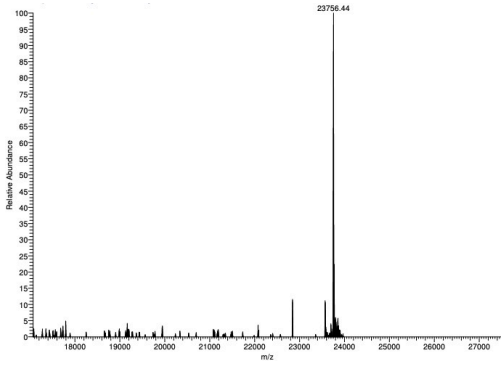
Nucleosome, Recombinant Human, H3K14ub dNucs are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding experiments.



DNA Gel Data: Nucleosome, Recombinant Human, H3K14ub run on a native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (200 ng). **Lane 2:** Intact nucleosomes (400 ng).



Protein Gel Data: Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H3K14ub (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, H3K14ub and H4) are indicated.



Mass Spec Data: H3K14ub protein analyzed by high resolution mass spectrometry. Expected mass = 23755.6 Da. Determined mass = 23756.44 Da.

References:

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