

Nucleosome, Recombinant Human, H4K12me1 dNuc, Biotinylated



EpiCypher®

Catalog No. 16-0393
Lot No. 19158001
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 H4 (created by a proprietary synthetic method) contains monomethylated lysine at position 12. 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.

Formulation:

Nucleosome, Recombinant Human, H4K12me1 (27.4 µg protein weight, 50 µg DNA+protein) in 61.1 µl 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 4.09 µmolar. MW = 199,970.16 Da

Storage and Stability:

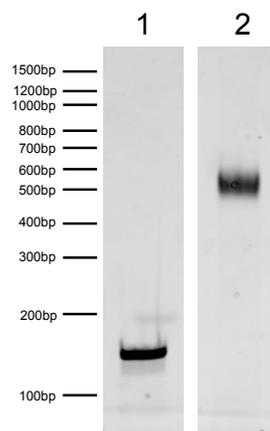
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

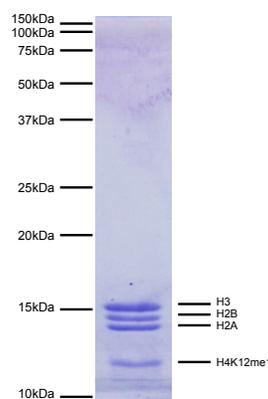
Nucleosome, Recombinant Human, H4K12me1 dNucs are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding experiments. **Nucleosome, Recombinant Human, H4K12me1 dNucs from EpiCypher does not contain free DNA which could alter assayed activities.**

References:

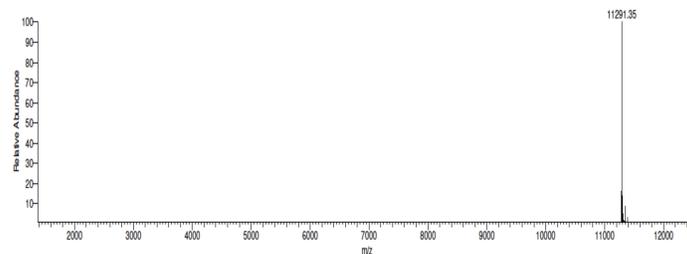
Lowary PT and J Widom (1998). *J Mol Biol* 276: 19-42.
Luger K et al (1999). *Methods Mol Biol* 119: 1-16.



DNA Gel Data: Nucleosome, Recombinant Human, H4K12me1 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).



Protein Gel Data: Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H4K12me1 (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, H3 and H4K12me1) are indicated.



Mass Spec Data: H4K12me1 protein analyzed by high resolution mass spectrometry. Expected mass = 11,291.15 Da. Determined mass = 11,291.35 Da.

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