

Nucleosome, Recombinant Human, H3.1K27me3,S28phos, Biotinylated

Catalog No 16-0397
Lot No 21104001-51
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 containing a 5' biotin-TEG. The 601 sequence, identified by Lowary and Widom [1], has high affinity for histone octamers and is useful for nucleosome assembly. Histone H3 (created by a proprietary synthetic method) contains trimethyl-lysine at position 27 and phosphoserine at position 28. H3S28 is an essential residue for modulating PRC2-mediated methylation at H3K27me3 [2].

Formulation:

H3.1K27me3,S28phos dNuc (27.4 µg protein weight, 50 µg DNA + protein) in 50 µL 10 mM Tris HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 5.0 µM. MW = 200,103.9 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:

H3.1K27me3,S28phos 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.

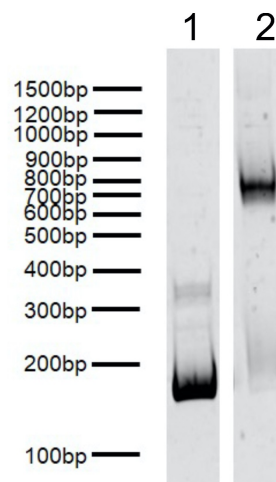
References:

- [1] Lowary PT and Widom J (1998) *J Mol Biol* 276: 19-42.
- [2] Yung et al (2015) *Cell Rep* 11(9): 1437-45.

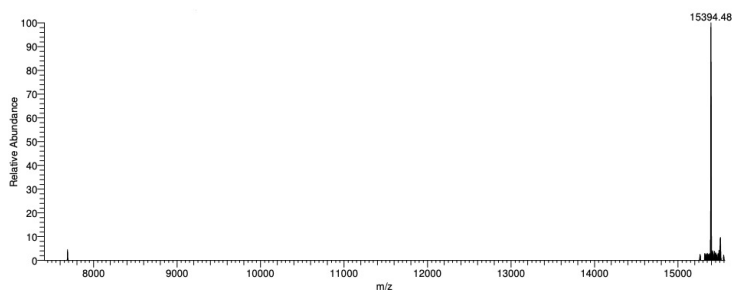
This product is for *in vitro* research use only and is not intended for use in humans or animals.



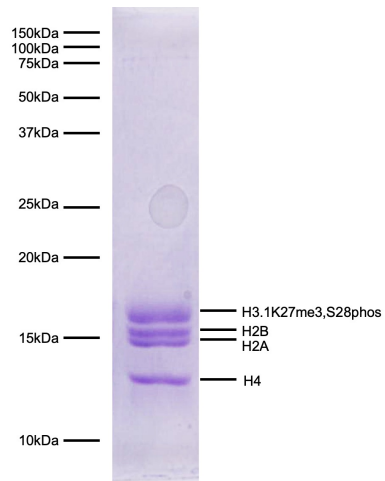
EpiCypher®



DNA Gel Data: H3K27me3,S28phos dNuc resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (Catalog No. 18-0005; 100 ng). **Lane 2:** Intact H3K27me3,S28phos nucleosome (400 ng).



Mass Spec Data: Synthetic H3.1K27me3,S28phos histone analyzed by high resolution mass spectrometry. Expected mass = 15,394.9 Da. Determined mass = 15,394.48 Da.



Protein Gel Data: Coomassie stained PAGE gel of proteins in H3.1K27me3,S28phos dNuc (1 µg) to demonstrate the purity of histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3K27me3,S28phos and H4) are indicated.

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