

Nucleosome, Recombinant Human, H4K20me2 dNuc

Catalog No. 16-0332
Lot No. 17108001
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 dimethyl-lysine at position 20. 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, H4K20me2 (27 µg protein weight, 50.0 µg DNA+protein) in 36.3 µl 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 6.85 µmolar. MW = 201,008 Da.

Storage and Stability:

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

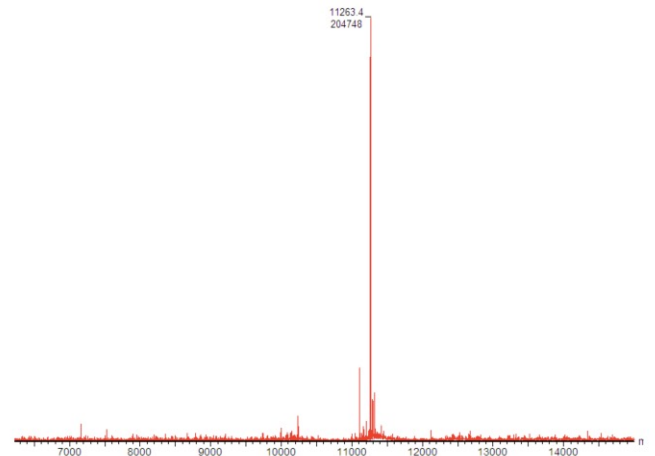
Application Notes:

Nucleosome, Recombinant Human, H4K20me2 are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding experiments. **Nucleosome, Recombinant Human, H4K20me2 from EpiCypher does not contain free DNA which could alter assayed activities.**

References Using this Product:

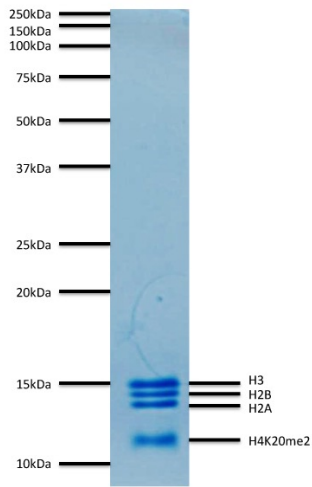


Western Blot Data: Western Analysis of Nucleosome, Recombinant Human, H4K20me2. **Top Panel:** Unmodified H4 (Lane 1) and H4K20me2 containing nucleosomes (Lane 2) were probed with an anti-H4K20me2 antibody and analyzed via ECL readout. Only the H4K20me2 sample produced a detectable signal. **Bottom Panel:** Detail from Coomassie stained gel showing unmodified (Lane 1) and H4K20me2 nucleosomes (Lane 2).

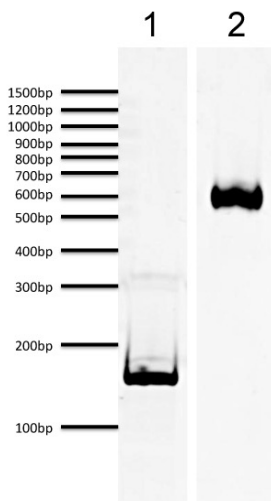


Mass Spec Data: Synthetic H4K20me2 protein analyzed by ESI-TOF mass spectrometry. Expected mass = 11264.1 Da. Determined mass = 11263.4 Da.

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



Protein Gel Data: Coomassie stained PAGE gel of proteins in Nucleosome, Recombinant Human, H4K20me2 (2 μ g) 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 H4K20me2) are indicated.



DNA Gel Data: Nucleosome, Recombinant Human, H4K20me2 run on a non-denaturing acrylamide gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA extracted from nucleosomes (200 ng). **Lane 2:** Intact nucleosomes (400 ng).