

Nucleosome, Recombinant Human, H2BK120ub dNuc, Biotinylated

Catalog No. 16-0370
Lot No. 18197001
Pack Size 50 µg



EpiCypher®

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 H2B (created by a proprietary semi-synthetic method) contains ubiquitin-lysine at position 120. 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, H2BK120ub (28.9 µg protein weight, 50 µg total weight) in 45.5 µl 10mM Tris HCl, pH 7.5, 25mM NaCl, 1mM EDTA, 2mM DTT, 20% glycerol. Molarity = 5.06 µmolar. MW = 216985.9 Da.

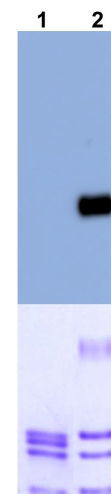
Storage and Stability:

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

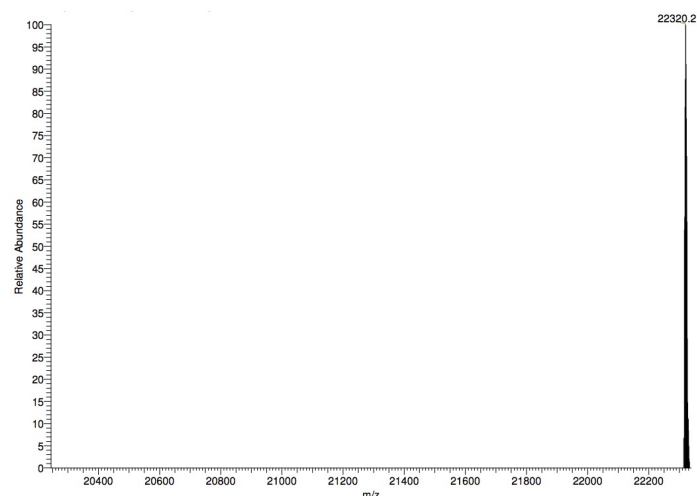
Application Notes:

Nucleosome, Recombinant Human, H2BK120ub dNucs are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding experiments. **Nucleosome, Recombinant Human, H2BK120ub dNucs from EpiCypher does not contain free DNA which could alter assayed activities.**

References:

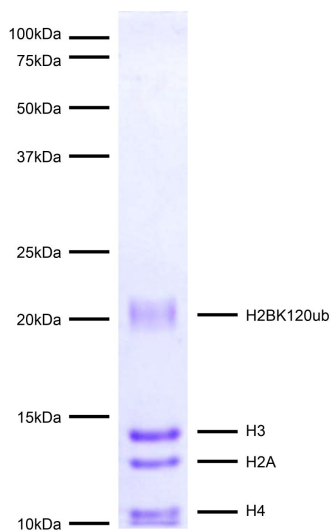


Western Blot Data: Western Analysis of Nucleosome, Recombinant Human, H2BK120ub. **Top Panel:** Unmodified H2B (Lane 1) and H2BK120ub containing nucleosomes (Lane 2) were probed with an anti-H2BK120ub antibody and analyzed via ECL readout. Only the H2BK120ub sample produced a detectable signal. **Bottom Panel:** Detail from Coomassie stained gel showing unmodified nucleosomes (Lane 1) and H2BK120ub nucleosomes (Lane 2).

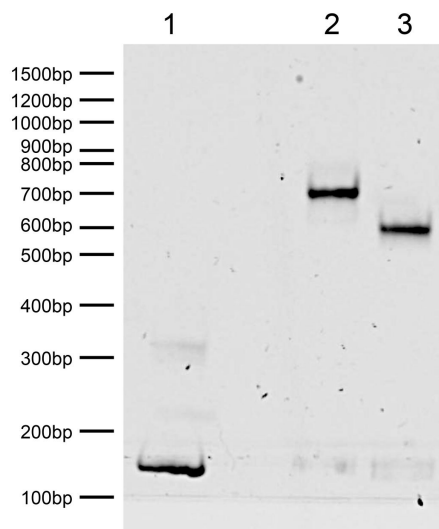


Mass Spec Data: Semi-synthetic H2BK120ub protein analyzed by nanospray-orbitrap high resolution mass spectrometry. Expected mass = 22321.8 Da. Determined mass = 22320.2 Da.

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, H2BK120ub (1 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2BK120ub, H3 and H4) are indicated.



DNA Gel Data: Nucleosome, Recombinant Human, H2BK120ub dNucs resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA extracted from nucleosomes (200 ng). **Lane 2:** Intact H2BK120ub nucleosomes (400ng). **Lane 3:** Intact unmodified nucleosomes (400 ng).

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