

Nucleosome, Recombinant Human, H2AK15ub1 dNuc, Biotinylated

Catalog No 16-0399
Lot No 21218001-01
Pack Size 25 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-P20671; H2B-O60814; H3.1-P68431; H4-P62805) wrapped by 147 base pairs of 601 positioning sequence DNA. Histone H2A (created by a proprietary semi-synthetic method) contains ubiquitin-lysine at position 15. The nucleosome is the basic subunit of chromatin. The 147 bp 601 sequence, identified by Lowary and Widom [1], has high affinity for histone octamers and is useful for nucleosome assembly. The DNA contains a 5' biotin-TEG group.

Formulation:

H2AK15ub1 dNuc (14.4 µg protein weight, 25 µg DNA + protein) in 27.9 µL 10 mM Tris HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 4.1 µM. MW = 216,895.8 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:

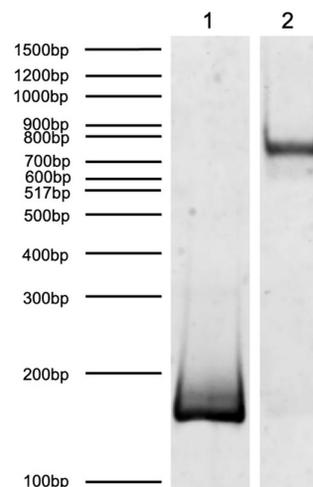
H2AK15ub1 dNuc is highly purified and suitable for a variety of applications, including use as a substrate in enzymatic assays or for effector protein binding experiments.

References:

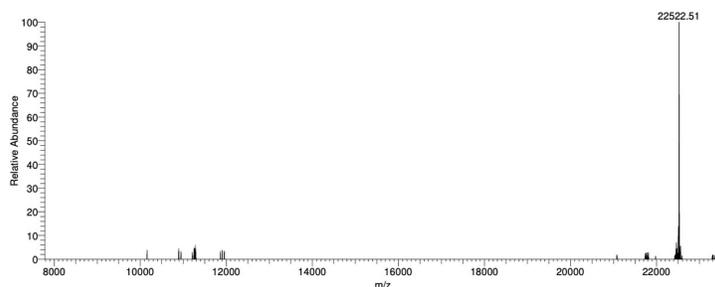
[1] Lowary PT and Widom J (1998) *J Mol Biol* 276:19-42.



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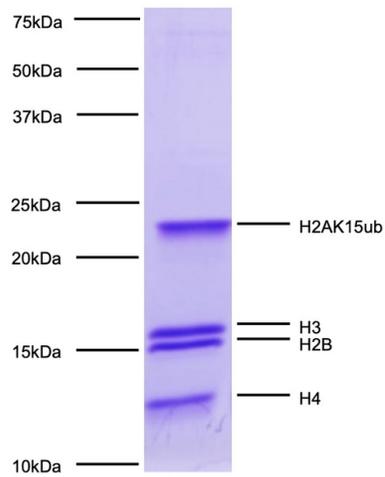


DNA Gel Data: H2AK15ub1 dNuc resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (EpiCypher 18-0005; 100 ng). **Lane 2:** Intact H2AK15ub1 nucleosomes (400 ng).



Mass Spec Data: Semi-synthetic H2AK15ub1 histone analyzed by high resolution mass spectrometry. Expected mass = 22,522.12 Da. Determined mass = 22,522.51 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 H2AK15ub1 dNuc (1 µg) demonstrates the purity of histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2AK15ub1, H2B, H3, and H4) are indicated.

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