

# Nucleosome, Recombinant Human, H2AK129ub1 dNuc, Biotinylated



## EpiCypher®

**Catalog No** 16-0400  
**Lot No** 21245001-02  
**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 129. 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:

H2AK129ub1 dNuc (14.4 µg protein weight, 25 µg DNA + protein) in 25.5 µL 10 mM Tris HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 4.52 µM. MW = 216,953.5 Da.

### Storage and Stability:

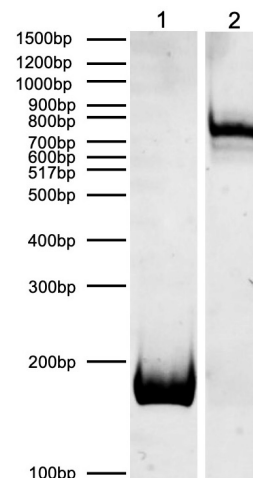
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

### Application Notes:

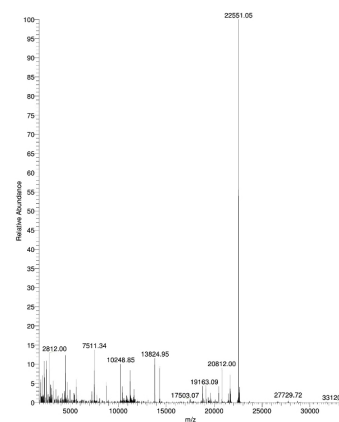
H2AK129ub1 dNuc is highly purified and suitable for a variety of applications, including use as a substrate in enzymatic assays or for effector protein binding experiments.

### References:

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

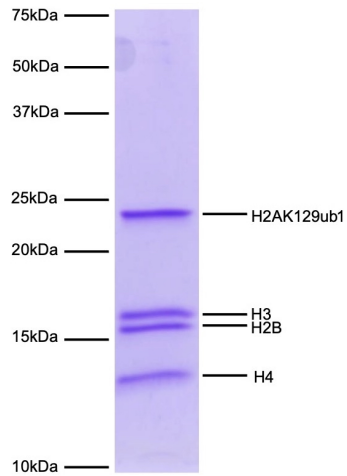


**DNA Gel Data:** H2AK129ub1 dNuc resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (EpiCypher 18-0005; 100 ng). **Lane 2:** Intact H2AK129ub1 nucleosomes (400 ng).



**Mass Spec Data:** Semi-synthetic H2AK129ub1 histone analyzed by high resolution mass spectrometry. Expected mass = 22,551.0 Da. Determined mass = 22,551.05 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 H2AK129ub1 dNuc (1  $\mu$ g) demonstrates the purity of histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2AK129ub1, H2B, H3, and H4) are indicated.

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