

# Nucleosome, Recombinant Human, H3K79me1 dNuc, Biotinylated

**Catalog No.** 16-0367  
**Lot No.** 19011001  
**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 H3 (created by a proprietary synthetic method) contains monomethyl-lysine at position 79. 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, H3K79me1 (27.3 µg protein weight, 50 µg total weight) in 131.6 µl of 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol.  
Molarity = 1.9 µmolar. MW = 199,885.9 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:

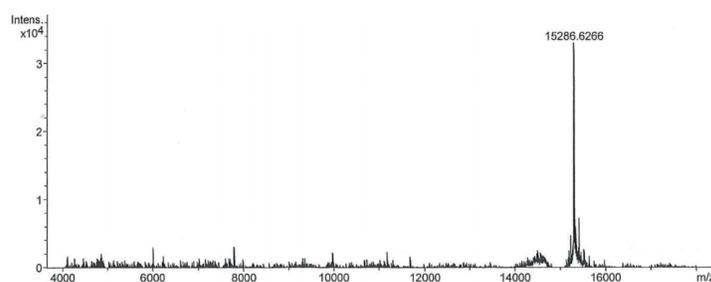
Nucleosome, Recombinant Human, H3K79me1 dNucs are highly purified and are suitable for use as substrates in enzyme screening assays or for effector protein binding experiments. **Nucleosome, Recombinant Human, H3K79me1 dNucs from EpiCypher does not contain free DNA which could alter assayed activities.**

### References:

Lowary PT and J Widom (1998). *J Mol Biol* 276: 19-42.  
Luger K et al (1999). *Methods Mol Biol* 119: 1-16.

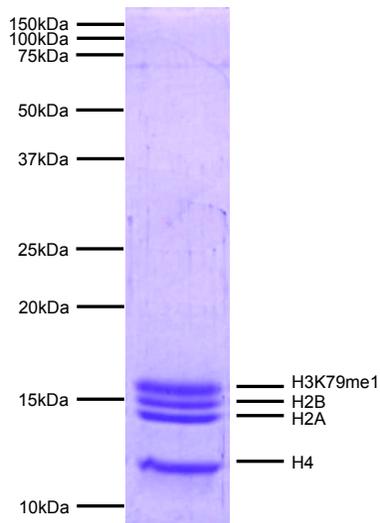


**Western Blot Data:** Western Analysis of Nucleosome, Recombinant Human, H3K79me1. **Top Panel:** Unmodified H3 (Lane 1) and H3K79me1 containing nucleosomes (Lane 2) were probed with an anti-H3K79me1 antibody and analyzed via ECL readout. Only the H3K79me1 sample produced a detectable signal. **Bottom Panel:** Detail from Coomassie stained gel showing unmodified nucleosomes (Lane 1) and H3K79me1 nucleosomes (Lane 2).

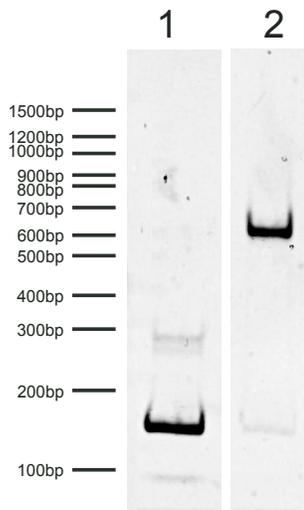


**Mass Spec Data:** H3K79me1 protein analyzed by high resolution mass spectrometry. Expected mass = 15285.9 Da. Determined mass = 15286.6 Da.

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, H3K79me1 (1  $\mu$ g) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3K79me1 and H4) are indicated.



**DNA Gel Data:** Nucleosome, Recombinant Human, H3K79me1 run on a native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Intact nucleosomes (400 ng).

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