

Tailless Nucleosomes, Recombinant Human, Biotinylated



EpiCypher®

Catalog No 16-0027

Lot No 21166002-61

Pack Size 50 µg

Product Description:

Mononucleosomes assembled from recombinant human histones expressed in *E. coli* (two each of histones H2A, H2B, H3.1 and H4; accession numbers: H2A-P04908; H2B-O60814; H3.1-P68431; H4-P62805). Histones were assembled into octamers and wrapped with 147 base pairs of 5' biotinylated 601 Sequence DNA, originally discovered by Lowry and Widom [1]. After assembly, histone tails were enzymatically removed. This product is ideal for use as a negative control in binding assays and pull-down experiments.

Formulation:

Purified recombinant tailless nucleosomes (50 µg protein + DNA total mass, 25 µg protein by mass) in 46.9 µL of 10 mM Tris-HCl pH 7.5, 1 mM EDTA, 25 mM NaCl, 2 mM DTT, 20% glycerol. Molarity = 5.82 µM. MW = 183,160.5 Da (theoretical).

Storage and Stability:

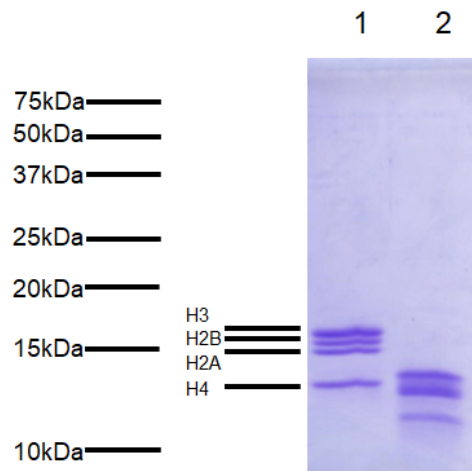
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

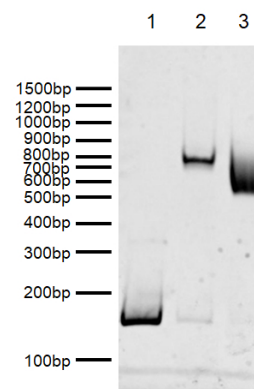
Tailless Nucleosome is highly purified and suitable for use as a negative control or substrate in enzyme screening assays and nucleosome binding experiments. The absence of histone tails makes it as an ideal control for conducting enzyme activity and screening assays. The biotin group on the DNA enables affinity binding applications.

References:

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



Protein Gel Data: Coomassie stained SDS-PAGE to demonstrate purity of the histones in the preparation. **Lane 1:** Histone proteins in the nucleosome before enzymatic removal of tails. **Lane 2:** Histone proteins after tail removal. Sizes of molecular weight markers and positions of the intact core histones (H2A, H2B, H3.1 and H4) are indicated.



DNA Gel Data: Recombinant Nucleosomes resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Intact nucleosomes (400 ng). **Lane 3:** Tailless Nucleosomes (400 ng).

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