

# Mononucleosomes (H3.3K36M), Recombinant Human Biotinylated

**Catalog No.** 16-0344

**Lot No.** 20071003-29

**Pack Size** 50 µg



## EpiCypher®

### Product Description:

Recombinant human histone H3.3 (H3F3A, H3.3A, H3F3, accession P84243) containing a methionine at position 36, expressed in *E. coli*. Histone H3 is one of the four proteins that are present in the nucleosome, the basic repeating unit subunit of chromatin, consisting of 147 base pairs of DNA wrapped around an octamer of core histone proteins (H2A, H2B, H3 and H4). H3.3 is a histone variant, found in regions of high chromatin turnover outside of S-phase (*e.g.* at actively transcribed genes). 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:

Mononucleosomes (H3.3K36M), Recombinant Human (27.3 µg protein weight, 50 µg DNA+protein) in 40.3 µl 10 mM Tris HCl, pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 6.21 µmolar. MW = 199,713.5.

### 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:

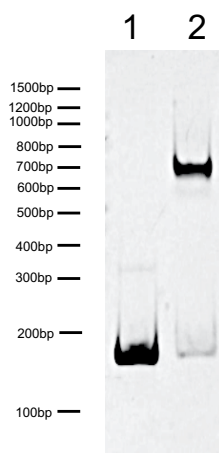
Mononucleosomes (H3.3K36M), Recombinant Human are highly purified and suitable for use as substrates in enzyme screening assays, structural studies, or effector protein binding experiments.

### References:



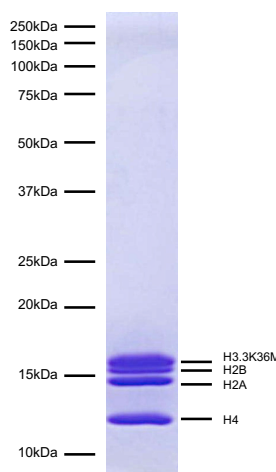
#### Western Blot Data:

Western analysis of Mononucleosomes (H3.3K36M), Recombinant Human. **Top Panel:** Unmodified H3.3 (Lane 1) and H3.3K36M containing nucleosomes (Lane 2) were probed with an anti-H3K36M antibody. Only the H3.3K36M sample produced a detectable signal. **Bottom Panel:** Detail from Coomassie stained gel of Western blot.



#### DNA Gel Data:

Mononucleosomes (H3.3K36M), Recombinant Human resolved by Native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Intact nucleosomes (400 ng).



#### Protein Gel Data:

Coomassie stained PAGE gel of proteins in Mononucleosomes (H3.3K36M), Recombinant Human (1 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3.3K36M and H4) are indicated.

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