

Mononucleosomes (H3.3), Human Recombinant Biotinylated

Catalog No. 16-0011
Lot No. 15321001
Pack Size 25 µg



Product Description:

Mononucleosomes assembled from recombinant human histones expressed in *E. coli* (two each of histones H2A, H2B, H3.3 and H4; accession numbers: H2A-P04908; H2B-O60814; H3.3-P84243; H4-P62805) wrapped by 147 base pairs of 601 sequence DNA. The nucleosome is the basic subunit of chromatin. The 601 sequence, identified by Lowary and Widom, has high affinity for histone octamers and is useful for nucleosome assembly.

Formulation:

Purified recombinant mononucleosomes at 0.84 mg/ml (25 µg protein by mass, 45.9 µg protein+DNA in 29.8 µl) in 10 mM Tris-HCl pH 7.5, 1 mM EDTA, 25 mM NaCl, 2 mM DTT, & 20% glycerol. Concentration of nucleosomes is 7.68 µM. Nucleosome molecular weight = 200,876 Da.

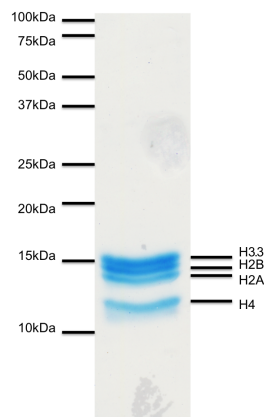
Storage and Stability:

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

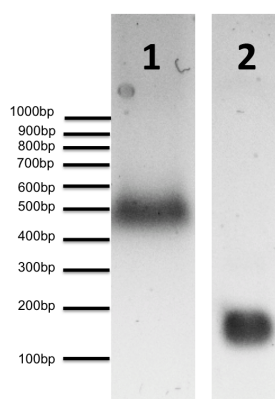
Application Notes:

Recombinant mononucleosomes are highly purified and are suitable for use as substrates in enzyme screening assays or for nucleosome binding experiments. The absence of post-translational histone modifications makes them ideal for conducting enzyme activity and screening assays. **EpiCypher Mononucleosomes (H3.3), Human Recombinant Biotinylated do not contain free DNA which could alter assayed activities.**

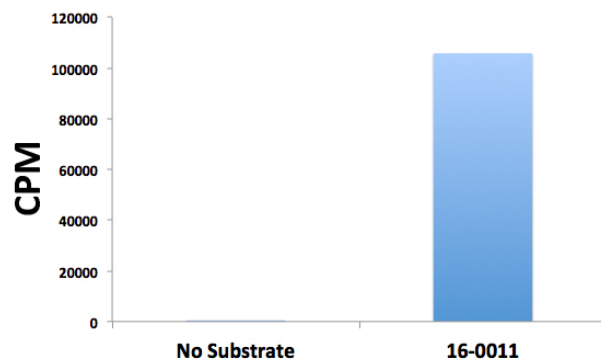
References:



Protein Gel Data: Coomassie stained PAGE gel of proteins in Mononucleosomes (H3.3), Human Recombinant Biotinylated (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, H3.3 and H4) are indicated.



DNA Gel Data: Mononucleosomes (H3.3), Human Recombinant Biotinylated run on an agarose gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Intact nucleosomes (400 ng). **Lane 2:** Free DNA extracted from nucleosomes (200 ng).



Histone Methyltransferase Assay Data:

Recombinant SET8 histone methyltransferase was used in radioactive methyltransferase assays with a variety of substrates as indicated, with SET8 exhibiting the highest level of activity in combination with recombinant nucleosomes (16-0011).