

Mononucleosomes (H4 Δ N15), Human Recombinant Biotinylated



EpiCypher™

Catalog No. 16-0018
Lot No. 17255001
Pack Size 50 μ g

Product Description:

Mononucleosomes assembled from recombinant human histones expressed in *E. coli* (two each of histones H2A, H2B, H3 and H4 (Δ N15)). Accession numbers: H2A-P04908; H2B-O60814; H3.1-P68431; H4-P62805) with the amino acid sequence of H4 beginning with lysine 16 (amino acids 1-15 are deleted), wrapped by 147 base pairs of 601 positioning sequence DNA. 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:

Purified recombinant mononucleosomes (50 μ g total mass, 27.4 μ g protein) in 50 μ l 10 mM Tris-HCl pH 7.5, 1 mM EDTA, 25 mM NaCl, 2 mM DTT, & 20% glycerol. Concentration of nucleosomes is 5.24 μ M. Nucleosome molecular weight = 190,967.6 Da.

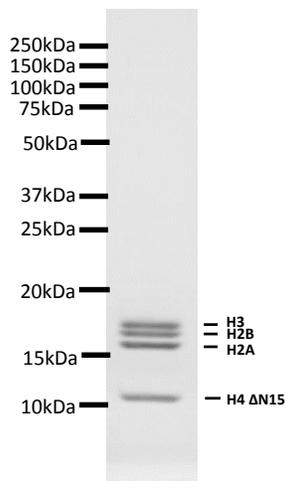
Storage and Stability:

Stable for six (6) months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

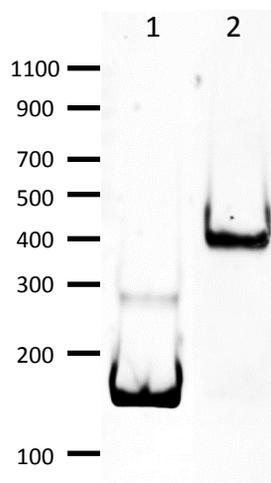
Application Notes:

Mononucleosomes (H4 Δ N15), Human Recombinant Biotinylated are highly purified and suitable for use as substrates in enzyme screening assays, structural studies, or effector protein binding experiments. The N-terminal deletion allows for the study of the role of the N-terminus in many aspects of chromatin biology.

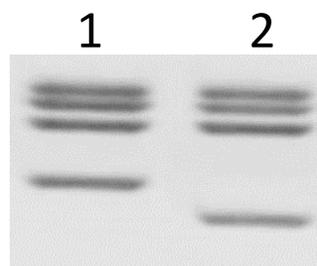
References:



Protein Gel Data: Coomassie stained PAGE gel of proteins in Mononucleosomes (H4 Δ N15), Human Recombinant Biotinylated (1 μ g) demonstrates the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4 Δ N15) are indicated.



DNA Gel Data: Mononucleosomes (H4 Δ N15), Human Recombinant Biotinylated run on a an 8% Native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** DNA extracted from nucleosomes (100 ng). **Lane 2:** Intact nucleosomes (300 ng).



Detailed Protein Gel Data: Coomassie stained PAGE gel of proteins in WT Nucleosomes (Lane 1) resolved alongside proteins in Nucleosome (H4 Δ N15), Human Recombinant Biotinylated (Lane 2). The faster migration of the H4 species observed in Lane 2 as compared to Lane 1 denotes the deletion of the amino acids from the N-terminus of the histone protein.

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