

Mononucleosomes, Recombinant, Hemi-methylated 199x601 DNA, Biotinylated

Catalog No. 16-2043

Lot No. 20293001-13

Pack Size 50 µg



EpiCypher®

Product Description:

Mononucleosomes assembled from recombinant histones expressed in *E. coli* (two each of histones H2A, H2B, H3 and H4; accession numbers: H2A-P06897; H2B-P02281; H3-Q92133; H4-P62799) wrapped by 199 base pairs of DNA containing the 601 positioning sequence DNA. The the 199bp DNA sequence contains a centrally positioned 601 sequence, identified by Lowary and Widom, which is a 147-base pair sequence that has high affinity for histone octamers and is useful for nucleosome assembly. The 601 sequence is flanked by a hemi-methylated 26 bp sequence as shown in application notes and contains a 5' biotin-TEG group.

Formulation:

Mononucleosomes, Recombinant, Hemi-methylated 199x601 DNA (50 µg DNA+protein, 23.4 µg protein weight) in 49 µl 10 mM Tris pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM EDTA, 20% glycerol. Molarity = 4.40 µmolar. MW = 231,964.24 Da.

Storage and Stability:

Stable for six months at -20°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

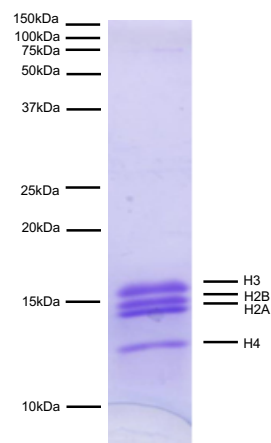
Application Notes:

DNA sequence

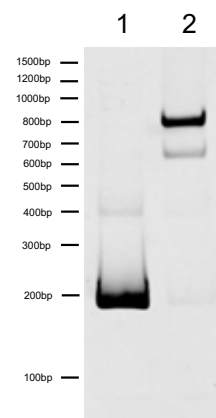
5'-Biotin-TEG

GGACCCTATACGCGGCCGCCGAATTCCTGGAGAATCCCGGTC
TGCAGGCCGCTCAATTGGTCGTAGACAGCTCTAGCACCGCTT
AAACGCACGTACGCGCTGTCCCCGCGTTTTAAACCGCCAAGG
GGATTACTCCCTAGTCTCCAGGCACGTGTCAGATATATACATC
CTGTGGATCCGCCGGTCGCGAACAGCGACC3'

3'CCTGGGATATGCGCCGGCGGCTTAAGGACCTCTTAGGGCC
AGACGTCCGGCGAGTTAACAGCATCTGTGCGAGATCGTGGC
GAATTTGCGTGCATGCGCGACAGGGGGCGCAAATTTGGCGG
TTCCCCTAATGAGGGATCAGAGGTCCGTGCACAGTCTATATA
TGTAGGACACCTAGGCGGCCAGCGCTTGTCGCTGG5'



Protein Gel Data: Coomassie stained PAGE gel of proteins in Mononucleosomes, Recombinant, Hemi-methylated 199x601 DNA, 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 and H4) are indicated.



DNA Gel Data: Mononucleosomes, Recombinant, Hemi-methylated 199x601 DNA, Biotinylated run on a native PAGE gel and stained with ethidium bromide to visualize DNA. Lane 1: Free DNA. Lane 2: Intact nucleosomes (200 ng).

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