

Mononucleosomes, Recombinant, 199x601 DNA, Non-Biotinylated

Catalog No 16-2144

Lot No 22145002-02

Pack Size 50 µg

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 601 positioning sequence DNA. The 601 sequence, identified by Lowary and Widom [1], 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 26 bp sequence as underlined in application notes.

Formulation:

199x601 DNA Mononucleosomes (50 µg DNA + protein, 23.4 µg protein weight) in 60 µL 10 mM Tris pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. Molarity = 3.6 µM. MW = 231,389.05 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'GGACCCTATACGCGGCCGCCGAATTCCTGGAGAATCCCGG
TCTGCAGGCCGCTCAATTGGTCGTAGACAGCTCTAGCACCG
CTTAAACGCACGTACGCGCTGTCCCCCGCGTTTTTAACCGCCA
AGGGGATTACTCCCTAGTCTCCAGGCACGTGTCAGATATATA
CATCCTGTGGATCCGCGGTCGCGAACAGCGACC3'

Mononucleosomes, Recombinant, 199x601 DNA, Non-Biotinylated are suitable for use as substrates for nucleosome writers, erasers, and readers that require linker DNA for their activity.

References:

[1] Lowary & Widom *J Mol Biol* (1998). PMID: 9514715



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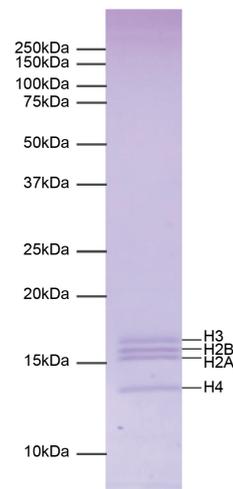


Figure 1: Protein gel data. Coomassie stained PAGE gel of proteins in Mononucleosomes, Recombinant, 199x601 DNA, Non-Biotinylated (1 µg) demonstrates the purity of histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4) are indicated.

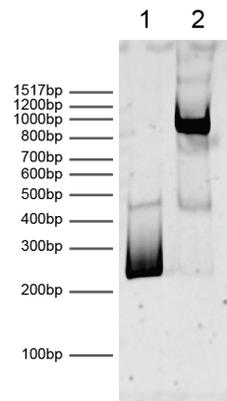


Figure 2: DNA gel data. Mononucleosomes, Recombinant, 199x601 DNA, Non-biotinylated resolved via native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA. **Lane 2:** Intact nucleosomes (200 ng).

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