Recombinant Nucleosome (E. coli-derived)

Product Information

Description:	Recombinant human nucleosome complex consisting of 147 bp DNA (PCR) and 2 molecules each of histones H2A, encompassing amino acids 2-130(end), H2B encompassing amino acids 2-126(end), H3 encompassing amino acids 2-136(end), and H4 encompassing amino acids 2-103(end). Each histone construct contains an N-terminal His-tag (6xHis). The recombinant complex was affinity purified.
Background:	Nucleosomes, formed of histones, are basic units of chromatin and play a central role in DNA compacting and organization within the nucleus of eukaryotic cells. Nucleosomes positioning along the DNA allows access to transcription factors and regulatory proteins to specific regions, influencing whether a gene is turned on or off. Enzymes involved in transcriptional regulation, in DNA replication, or in DNA damage responses can modify histones through phosphorylation, acetylation, methylation, and more. Therefore, nucleosomes can be used as substrate for these enzymes, among other uses.
Species:	Human
Construct:	Histone H2A (His-2-130(end)) / Histone H2B (His-2-126(end)) / Histone H3 (His-2-136(end)) / Histone H4 (His-2-103(end))
Concentration:	0.58 mg/ml
Expression System:	E. coli
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	20 mM Tris, pH 7.5, 1 mM EDTA, 1 mM DTT, and 20% glycerol
MW:	Histone H2A: 15 kDa; Histone H2B: 15 kDa; Histone H3: 16 kDa; Histone H4: 12 kDa
Genbank Accession:	Histone H2A: NM_033445; Histone H2B: NM_003528; Histone H3: NM_003532; and Histone 4: NM_003548
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.



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Quality Control Data





