

Recombinant Histone H2A.Z/H2B dimer

Catalog No: 81168, 81868

Lot No: 18218001

Expressed In: *E. coli*

Quantity: 100, 1000 µg

Concentration: 0.95 µg/µl

Source: Human

Buffer Contents: Recombinant Histone H2A.Z/H2B Dimer is in 10 mM Tris-HCl pH 7.4, 2 M NaCl, 1 mM EDTA, and 5 mM β-mercaptoethanol.

Background: Histone H2A and H2B are the core components of the nucleosome. H2A and H2B assemble H2A/H2B dimer, and two H2A/H2B dimers combine with H3/K4 tetramer to form histone octamer. The histone octamer is wrapped around by 146 bp DNA to assemble a nucleosome, which is the basic structural unit of chromatin *in vivo*.

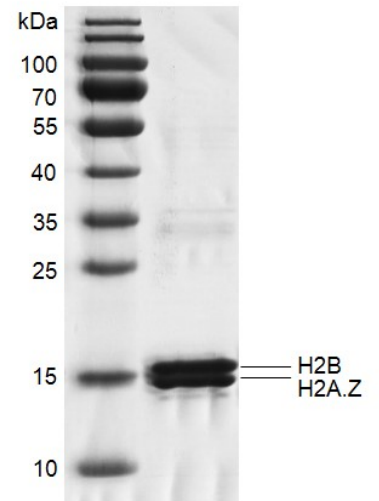
H2A.Z (also known as H2AFZ, Histone Family Member Z) is a histone H2A family member. It is highly conserved from yeast to human, with 90% of its primary sequence preserved among different species, showing only 60% homology with canonical histone H2A. H2A.Z is found in approximately 10% of mammalian nucleosomes. H2A.Z has been one of the most studied H2A variants in recent years. It plays an important role in different biological processes such as DNA replication, DNA repair, transcription regulation, cell cycle, spermatogenesis, chromosome segregation, centromere structure and maintenance of heterochromatic/euchromatic status. However, different studies reported diverse conclusions in the nucleosome stability and transcriptional regulation. The contradictory roles of H2A.Z *in vivo* might be explained by different combinations of H2A.Z with other epigenetic regulators, PTMs on H2A.Z and interaction with chromatin binding proteins.

Protein Details: Recombinant histone H2A.Z/H2B Dimer consists of full length human histones H2A.Z (accession number NP_002097.1) and full length human histone H2B (accession number NP_003509.1). Histone H2A.Z and H2B were expressed in *E. coli* cells. Recombinant Histone H2A.Z/H2B Dimer was assembled by dialysis and purified by gel filtration. The molecular weight of histone H2A.Z/H2B Dimer is 27.2 kDa.

Application Notes: Recombinant Histone H2A.Z/H2B Dimer is suitable for use as substrates in the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

Histone H2A.Z/H2B dimer



Recombinant Histone H2A.Z/H2B Dimer

13% SDS-PAGE Coomassie staining

MW:
H2A.Z: 13.4 kDa
H2B: 13.8 kDa

Purity: ≥ 90%