Recombinant H2A1B protein (His tag)

Catalog Number	542014
Synonyms	Histone H2A.2; Histone H2A/a; Histone H2A/m
Species	Human
Expression System	E. coli
Accession	P04908
Molecular Weight	Predictes a molecular mass of 15.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	2-130
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2-130 aa (P04908) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Introducing the recombinant Histone H2A type 1-B/E fragment (amino acids 2-130), a high-quality protein designed for chromatin and epigenetics research. This 129-amino acid fragment retains key structural features, offering a stable and soluble solution for studying nucleosome assembly, DNA interactions, and histone modifications in vitro. Histone H2A type 1-B/E is a core component of nucleosomes, which are fundamental units of chromatin responsible for compacting DNA into chromosomes. By wrapping DNA, nucleosomes regulate accessibility to cellular machinery, playing a pivotal role in transcription, DNA repair, replication, and chromosomal stability. This regulation is mediated through post-translational modifications (the histone code) and nucleosome remodeling. The protein is localized exclusively in the nucleus and chromosomes, underscoring its central function in epigenetic mechanisms and genome integrity.