Recombinant H2B1D protein (His tag)

Catalog Number	537869
Synonyms	H2B-clustered histone 5; HIRA-interacting protein 2; Histone H2B.1 B; Histone H2B.b; H2B/b
Species	Human
Expression System	E. coli
Accession	P58876
Molecular Weight	Predictes a molecular mass of 15.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	2-126
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-126 aa (P58876) 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	Recombinant Histone H2B type 1-D (H2BC5) fragment (residues 2-126) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment encompasses the core nucleosomal domain, providing an ideal tool for investigating chromatin dynamics, DNA packaging, and epigenetic regulation in human systems. Histone H2B type 1-D is a core component of nucleosomes, the fundamental repeating units of chromatin. Nucleosomes wrap and compact DNA into chromatin, playing a central role in regulating DNA accessibility for transcription, DNA repair, replication, and chromosomal stability. The protein's function is modulated through post-translational modifications that form part of the histone code, influencing gene expression and cellular processes. Located exclusively in the nucleus and associated with chromosomes, Histone H2B is essential for maintaining genomic integrity and epigenetic regulation in human cells.