Recombinant H2A2B protein (His tag)

Catalog Number	543078
Synonyms	H2A-clustered histone 21
Species	Human
Expression System	E. coli
Accession	Q8IUE6
Molecular Weight	Predictes a molecular mass of 15.52 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	>86%, 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 (Q8IUE6) 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	This product is a recombinant fragment of Histone H2A type 2-B (H2A-clustered histone 21), spanning residues 2-130, designed for structural and biochemical studies. It represents a stable, soluble unit of the protein, ideal for investigating nucleosome assembly and chromatin dynamics in research applications. Histone H2A type 2-B, encoded by the gene H2AC21 in Homo sapiens, is a core component of nucleosomes, which are fundamental units of chromatin. Nucleosomes compact DNA into a structured format, regulating accessibility for critical cellular processes such as transcription, DNA repair, DNA replication, and chromosomal stability. The protein's function is modulated through post-translational modifications, contributing to the 'histone code' that influences gene expression and genome integrity. It is localized in the nucleus and chromosomes, underscoring its essential role in epigenetic regulation and cellular function.