Recombinant H2A3 protein (His tag)

Catalog Number	538352
Synonyms	H2A-clustered histone 25
Species	Human
Expression System	E. coli
Accession	Q7L7L0
Molecular Weight	Predictes a molecular mass of 15.64 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	>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 2-130 aa (Q7L7L0) 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 H2A type 3 (H2A-clustered histone 25) fragment (residues 2-130) is a high-quality, stable protein designed for structural and biochemical studies. This 129-amino acid fragment retains key functional domains, offering researchers a soluble and reliable tool to investigate nucleosome assembly and chromatin dynamics. Histone H2A type 3, encoded by the H2AC25 gene in Homo sapiens, is a core component of nucleosomes, which are fundamental units of chromatin. Nucleosomes compact DNA into chromatin, thereby regulating DNA accessibility for essential 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 governs gene expression and genome integrity. Histone H2A type 3 is localized in the nucleus and chromosomes, underscoring its critical role in epigenetic regulation and cellular function.