Recombinant H2AV protein (His tag)

Catalog Number	545281
Synonyms	H2A.F/Z; H2A.Z variant histone 2
Species	Human
Expression System	E. coli
Accession	Q71UI9
Molecular Weight	Predictes a molecular mass of 15.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	2-128
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 2-128 aa (Q71UI9) 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 Human Histone H2A.V (H2A.Z variant histone 2) Fragment (residues 2-128) - A highly stable and soluble protein fragment ideal for structural biology and chromatin research applications. This carefully selected fragment maintains key functional domains while offering superior experimental handling characteristics for advanced molecular studies. Histone H2A.V (H2A.Z variant histone 2), encoded by the H2AZ2 gene, serves as a variant histone that replaces conventional H2A in specific nucleosome populations. Nucleosomes are fundamental chromatin units that package and compact DNA, thereby regulating DNA accessibility for essential cellular processes including transcription, DNA repair, replication, and chromosomal stability. The protein participates in the histone code mechanism through post-translational modifications and contributes to nucleosome remodeling. Evidence suggests H2A.V may be involved in constitutive heterochromatin formation and play a role in chromosome segregation during cell division. This histone variant localizes to the nucleus and chromosomes, positioning it at the epicenter of epigenetic regulation and genome maintenance mechanisms.