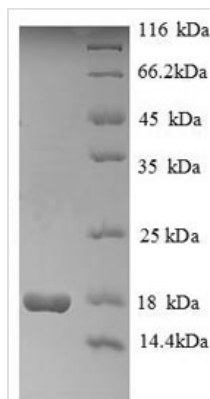




# Recombinant Human Histone H2A type 1 (HIST1H2AG)

<b>Product Code</b>	CSB-EP010389HU
<b>Relevance</b>	Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a tplate. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome rodeling.
<b>Abbreviation</b>	Recombinant Human HIST1H2AG protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P0C0S8
<b>Alias</b>	Histone H2A/p
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	SGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYL AAVLEYLTAEILELAGNAARDNKKTRIIPRHLQLAIRNDEELNKLLGKVITIAQGGV LPNIQAVLLPKKTESHKAKGK
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Source</b>	E.coli
<b>Target Names</b>	HIST1H2AG
<b>Expression Region</b>	2-130aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged
<b>Mol. Weight</b>	18.0kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

Cloning the gene encoding the Human HIST1H2AG protein (2-130aa) into a plasmid vector leads to the formation of recombinant plasmid. The resulting recombination plasmid is transformed into e.coli cells. e.coli cells containing the recombinant plasmid survive in the presence of a specific antibiotic and are selected to be cultured under conditions conducive to the expression of the gene of interest. A N-terminal 6xHis tag is linked to the protein. Following expression, the recombinant Human HIST1H2AG protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is utilized to resolve the resulting recombinant Human HIST1H2AG protein, demonstrating a purity exceeding 90%.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.