

Histone H3

Catalog # PVGS1020

Product Information

Primary Accession Species	P68431 Human
Sequence	Met1-Ala136, expressed with a 6 × His Tag and additional DDDDK amino acids at the N-terminal
Purity	> 90% as analyzed by SDS-PAGE and Commassie blue staining
Expression System	E. coli
Theoretical Molecular Weight	16.8 kDa
Formulation	Lyophilized from PBS, pH 7.4.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile water or buffer of choice.
Storage & Stability	Upon receiving, this product remains stable for up to 24 months at -70°C or -20°C. Once rehydrated, aliquot and store at -20°C.

Additional Information

Gene ID	8350;8351;8352;8353;8354;8355;8356;8357;8358;8968
Other Names	Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/i, Histone H3/j, Histone H3/k, Histone H3/l, H3C1 (HGNC:4766), H3FA, HIST1H3A
Target Background	Histone H3 is one of the five main histones involved in the structure of chromatin in eukaryotic cells. Featuring a main globular domain and a long N-terminal tail, H3 is involved with the structure of the nucleosomes of the "beads on a string" structure. Histone proteins are highly post-translationally modified however Histone H3 is the most extensively modified of the five histones. Histone H3 is an important protein in the emerging field of epigenetics, where its sequence variants and variable modification states are thought to play a role in the dynamic and long term regulation of genes.

Protein Information

Name	H3C1 (HGNC:4766)
Synonyms	H3FA, HIST1H3A

Function	Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. 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 remodeling.
Cellular Location	Nucleus. Chromosome.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.