

**Histone H3**  
Catalog # PVGS1020**Specification**

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**Histone H3 - Product Information**Primary Accession [P68431](#)**Species**  
Human**Sequence**

Met1-Ala136, expressed with a 6 × His Tag and additional DDDDK amino acids at the N-terminal

**Purity**

&gt; 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.

**Histone H3 - 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 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=4766](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=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.

## Histone H3 - 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.

## Histone H3 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Histone H3 - Images