

**Histone H3 Antibody (S10)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1051d**

**Specification**

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**Histone H3 Antibody (S10) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB,E                   |
| Primary Accession | <a href="#">P84243</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 15328                  |
| Antigen Region    | 1-30                   |

**Histone H3 Antibody (S10) - Additional Information**

**Gene ID** 3020;3021

**Other Names**

Histone H33, H3F3A, H33A, H3F3

**Target/Specificity**

This Histone H3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human Histone H3.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Histone H3 Antibody (S10) is for research use only and not for use in diagnostic or therapeutic procedures.

**Histone H3 Antibody (S10) - Protein Information**

**Name** H3-3A ([HGNC:4764](#))

**Synonyms** H3.3A, H3F3, H3F3A

**Function** Variant histone H3 which replaces conventional H3 in a wide range of nucleosomes in

active genes. Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA synthesis. Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin. 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

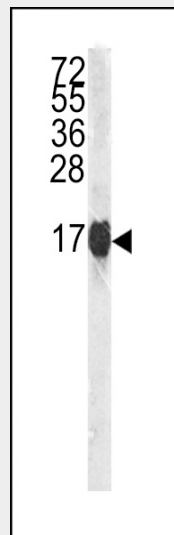
Nucleus. Chromosome

#### Histone H3 Antibody (S10) - 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 Antibody (S10) - Images



Western blot analysis of Histone H3 (N-term) (Cat.#AP1051d) in HL60 cell line lysates (35ug/lane). Histone H3 (arrow) was detected using the purified Pab.

#### Histone H3 Antibody (S10) - Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. The protein targeted by

this antibody is a replication-independent member of the histone H3 family.

### **Histone H3 Antibody (S10) - References**

- Marzluff, W.F., et al., Genomics 80(5):487-498 (2002).  
Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).  
Albig, W., et al., Genomics 40(2):314-322 (1997).  
Albig, W., et al., Genomics 10(4):940-948 (1991).