

**Phospho-H3(S10) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3003a**

**Specification**

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

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P68431</a>
Other Accession	<a href="#">P61830</a> , <a href="#">P02299</a> , <a href="#">P08898</a> , <a href="#">P02302</a> , <a href="#">P02301</a> , <a href="#">Q6NXT2</a> , <a href="#">A5PK61</a> , <a href="#">Q6PI79</a> , <a href="#">P84245</a> , <a href="#">P84246</a> , <a href="#">Q71LE2</a> , <a href="#">P84244</a> , <a href="#">P84243</a> , <a href="#">P84249</a> , <a href="#">Q6PI20</a> , <a href="#">P84247</a> , <a href="#">Q5E9F8</a> , <a href="#">Q27532</a> , <a href="#">Q9U281</a> , <a href="#">Q10453</a> , <a href="#">P84233</a> , <a href="#">P84228</a> , <a href="#">Q71DI3</a> , <a href="#">Q4ORF4</a> , <a href="#">P84229</a> , <a href="#">P84227</a> , <a href="#">Q6LED0</a> , <a href="#">P68433</a> , <a href="#">P68432</a> , <a href="#">Q16695</a> , <a href="#">Q71DJ3</a> , <a href="#">C0HL66</a>
Reactivity	<b>Human</b>
Predicted	<b>Bovine, Mouse, Rat, Chicken, Zebrafish, Xenopus, C.Elegans, Drosophila, Pig, Rabbit, Yeast</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Calculated MW	<b>15404</b>

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

**Gene ID** 8350;8351;8352;8353;8354;8355;8356;8357;8358;8968

**Other Names**

Histone H31, 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, HIST1H3A, H3FA

**Target/Specificity**

This H3 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S10 of human H3.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**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**

Phospho-H3(S10) Antibody is for research use only and not for use in diagnostic or therapeutic

procedures.

### Phospho-H3(S10) Antibody - 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

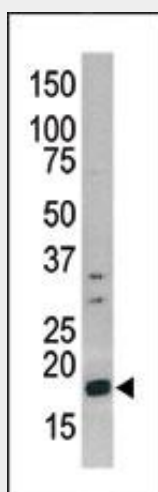
Nucleus. Chromosome.

### Phospho-H3(S10) Antibody - Protocols

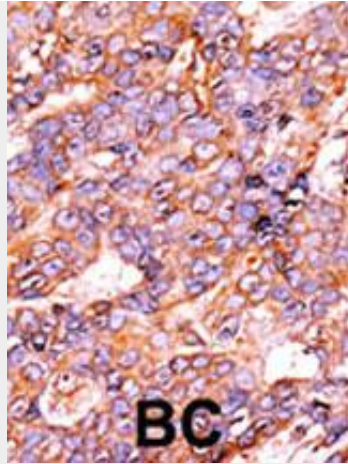
Provided below are standard protocols that you may find useful for product applications.

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

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



Western blot analysis of anti-Phospho-H3-pS10 Pab (Cat. #AP3003a) in CEM cell line lysate (35ug/lane). Phospho-H3-pS10 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **Phospho-H3(S10) Antibody - Background**

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. The gene for this protein is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. The gene is found in the large histone gene cluster on chromosome 6p22-p21.3.

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

- Lusic, M., et al., EMBO J. 22(24):6550-6561 (2003).
- Deng, L., et al., Virology 289(2):312-326 (2001).
- Deng, L., et al., Virology 277(2):278-295 (2000).
- El Kharroubi, A., et al., Mol. Cell. Biol. 18(5):2535-2544 (1998).
- Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).