

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

Specification

Phospho-H3(S10) Antibody - Product Information

Application	IHC-P, WB,E
Primary Accession	P68431
Other Accession	P61830 , P02299 , P08898 , P02302 , P02301 , Q6NXT2 , A5PK61 , Q6PI79 , P84245 , P84246 , Q71LE2 , P84244 , P84243 , P84249 , Q6PI20 , P84247 , Q5E9F8 , Q27532 , Q9U281 , Q10453 , P84233 , P84228 , Q71D13 , Q4ORF4 , P84229 , P84227 , Q6LED0 , P68433 , P68432 , Q16695 , Q71DJ3 , C0HL66
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Chicken, Zebrafish, Xenopus, C.Elegans, Drosophila, Pig, Rabbit, Yeast
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	15404

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

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

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

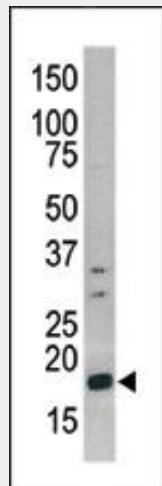
Nucleus. Chromosome.

Phospho-H3(S10) Antibody - Protocols

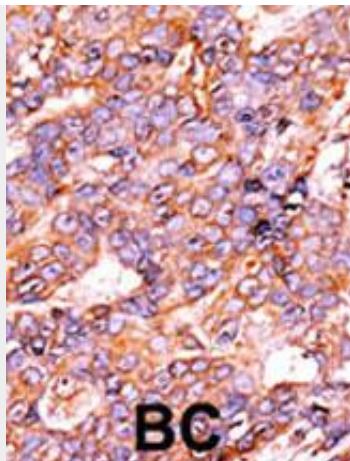
Provided below are standard protocols that you may find useful for product applications.

- [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).