10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-H3(S10) Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3003a

Product Information

Application	WB, IHC-P, 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, Q71DI3, Q4QRF4, P84229, P84227, Q6LED0, P68433, P68432, Q16695, Q71DJ3
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Chicken, Zebrafish, Xenopus, C.Elegans, Drosophila, Pig, Rabbit, Yeast, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5807
Calculated MW	15404

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~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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.

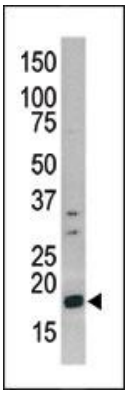
Background

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.

References

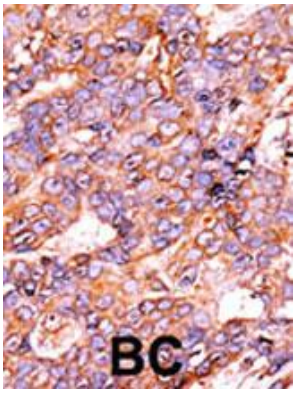
Lusic, M., et al., EMBO J. 22(24):6550-6561 (2003).
Deng, L., et al., Virology 289(2):312-326 (2001).
Deng, L., et al., Virology 277(2):278-295 (2000).
El Kharroubi, A., et al., Mol. Cell. Biol. 18(5):2535-2544 (1998).
Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).

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.



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