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

Anti-Histone H1 Antibody

Catalog # AP53678

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P16401
Other Accession	P16402, P10412
Reactivity	Human, Mouse, Rat, Rabbit, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22580

Additional Information

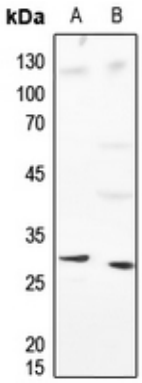
Gene ID	3009
Other Names	HIST1H1B; H1F5; Histone H1.5; Histone H1a; Histone H1b; Histone H1s-3; HIST1H1D; H1F3; Histone H1.3; Histone H1c; Histone H1s-2; HIST1H1E; H1F4; Histone H1.4; Histone H1b; Histone H1s-4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Histone H1. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/200 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

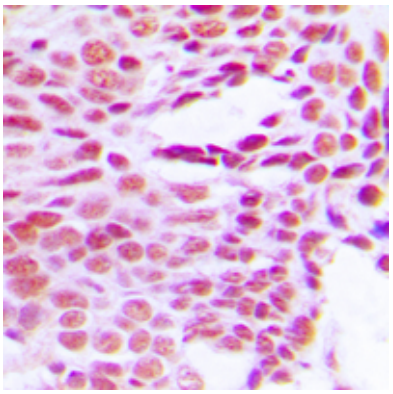
Name	H1-5 (HGNC:4719)
Function	Histone H1 protein binds to linker DNA between nucleosomes forming the macromolecular structure known as the chromatin fiber (By similarity). Histones H1 are necessary for the condensation of nucleosome chains into higher-order structured fibers and promote formation of the H3K27me3 mark by the PRC2/EED-EZH2 complex (PubMed:40516528). Also acts as a regulator of individual gene transcription through chromatin remodeling, nucleosome spacing and DNA methylation (By similarity).
Cellular Location	Nucleus. Chromosome. Note=Enriched at the nuclear periphery and colocalizes with compacted DNA (heterochromatin) (PubMed:15911621, PubMed:38530350). Also associates with actively transcribed chromatin (PubMed:10997781).

Tissue Location	Ubiquitous. Expressed in the majority of the cell lines tested and in testis.

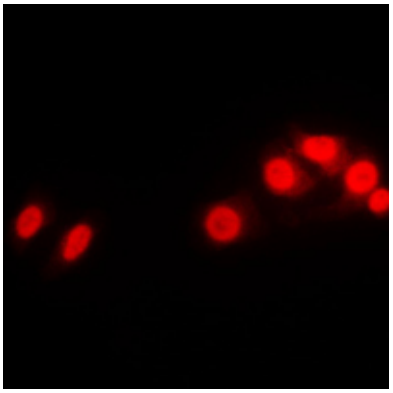
Images



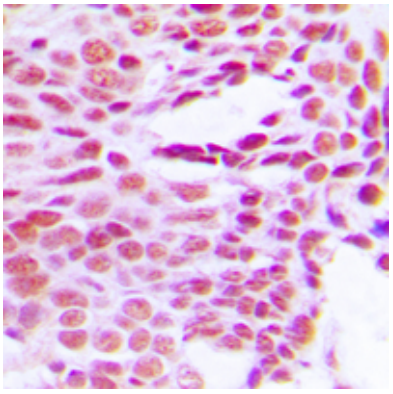
Western blot analysis of Histone H1 expression in mouse kidney (A), rat kidney (B) whole cell lysates. (Predicted band size: 22; 21 kD; Observed band size: 31 kD)



Immunohistochemical analysis of Histone H1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Histone H1 staining in Raw264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.



Immunohistochemical analysis of Histone H1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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