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Histone H1.3 Rabbit mAb

Catalog # AP75540

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	P16402
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	22350

Additional Information

Gene ID	3007
Other Names	H1-3
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:10-1:100 IP~~1:20-1:50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

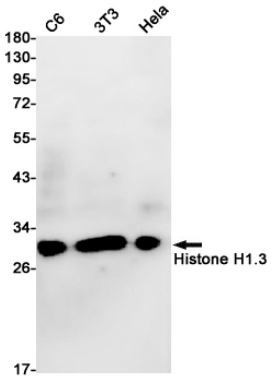
Name	H1-3 (HGNC:4717)
Function	Histone H1 protein binds to linker DNA between nucleosomes forming the macromolecular structure known as the chromatin fiber (PubMed:37922872). Histones H1 are necessary for the condensation of nucleosome chains into higher-order structured fibers and promote formation of the H3K27me3 mark by the PRC2/EED-EZH2 complex (PubMed:40516528). Together with histone H1-3, histone H1-3 acts as a regulator of splicing, most specifically exon skipping and intron retention events: histone H1-3 has a high affinity for introns and regulates splicing by affecting RNA polymerase II (RNAPII) elongation (PubMed:37922872). 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:38530350) According to PubMed:15911621 more commonly found in euchromatin

According to PubMed:10997781 is associated with inactive chromatin

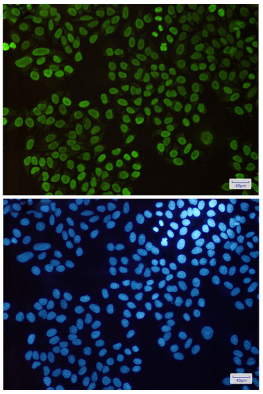
Background

Histone H1 protein binds to linker DNA between nucleosomes forming the macromolecular structure known as the chromatin fiber. Histones H1 are necessary for the condensation of nucleosome chains into higher-order structured fibers. Acts also as a regulator of individual gene transcription through chromatin remodeling, nucleosome spacing and DNA methylation .

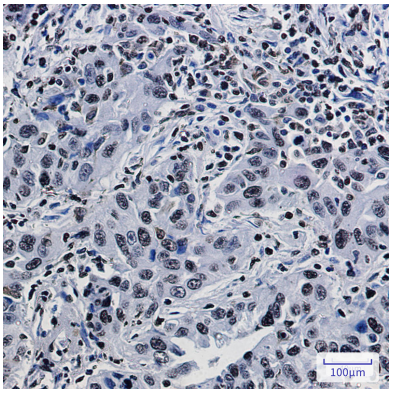
Images



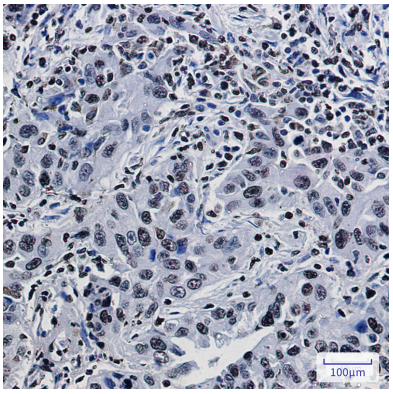
Western blot analysis of Histone H1.3 in C6, 3T3, Hela lysates using Histone H1.3 antibody.

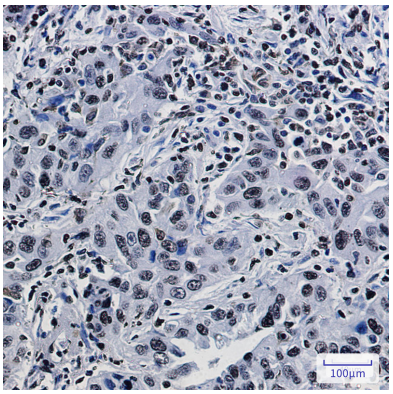


Immunocytochemistry analysis of Histone H1.3(green) in Hela using Histone H1.3 antibody,and DAPI(blue)



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using Histone H1.3 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





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