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Histone H1.2 Rabbit mAb

Catalog # AP77864

Product Information

Application	WB, IHC-P, IF, ICC, CHIP
Primary Accession	P16403
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human Histone H1.2
Purification	Affinity Chromatography
Calculated MW	21365

Additional Information

Gene ID	3006
Other Names	H1-2
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A CHIP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

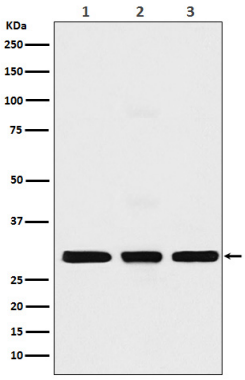
Name	H1-2 (HGNC:4716)
Function	Histone H1 protein binds to linker DNA between nucleosomes forming the macromolecular structure known as the chromatin fiber (PubMed:26581166, PubMed:38530350). Histone H1-2 is required for the condensation of nucleosome chains into higher-order structured fibers (PubMed:38530350). Compared to other histone H1 variants, H1-2 plays an essential role in nucleosome condensation: its absence leads to global chromatin decompaction, which is not observed when depleting other histone H1 variants (PubMed:38530350). Histone H1-2 also acts as a histone reader: specifically recognizes and binds histone H3 trimethylated at 'lys-27' (H3K27me3) (PubMed:26581166). Histones H1 also promote formation of the H3K27me3 mark by the PRC2/EED-EZH2 complex, possibly by facilitating restoration of H3K27me3 post- replication (PubMed:37429872, PubMed:40516528). Together with histone H1-3, histone H1-2 acts as a regulator of splicing, most specifically exon skipping and intron retention

events: histone H1-2 has a high affinity for exons 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 (PubMed:38530350).

Cellular Location

Nucleus. Nucleus, nucleolus Chromosome. Note=Enriched at the nuclear periphery and colocalizes with compacted DNA (heterochromatin) (PubMed:26581166, PubMed:38530350). Enriched within lamina-associated domains (PubMed:38530350).

Images



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