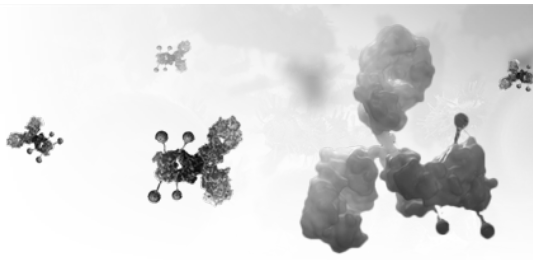

Mouse Anti-Histone H1 monoclonal antibody, clone 2H7 (CABT-RM134)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects Histone H1 in Drosophila species.
Target	Histone H1
Immunogen	GST-tagged recombinant fragment corresponding to 148 amino acids from the C-terminal half of Drosophila Histone H1.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Drosophila
Clone	2H7
Purification	Protein G purified
Conjugate	unconjugated
Applications	ChIP, ChIPseq, IP, WB
Epitope	C-terminus
Molecular Weight	~35 kDa observed; 26.36 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl

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Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction	Histone H1 is encoded by the His 1 gene in Drosophila species. Histone H1 is a linker histone that is involved in the organization and maintenance of chromatin higher order structure and plays an active role in the control of DNA replication and cell proliferation. The linker histone H1 family members are a key component of chromatin and bind to the nucleosomal core particle around the DNA entry and exit sites. Histone H1 is essential for the condensation of nucleosome chains into higher-order structures. In metazoans, H1 histones are smaller in size with about 200 amino acids. They have a short N-terminal tail, a central globular domain, and a long basic C-terminal tail. The central globular domain is shown to be highly conserved among all H1 subtypes. Manipulating levels of H1 histone can lead to both up- and down-regulation of specific genes. Depletion of H1 results in a massively altered chromosome structure with loss of chromosome banding. In Drosophila, a 20% reduction in H1 content leads to cessation of growth beyond the larval stage. Histone H1 undergoes phosphorylation mainly in the tail region, especially the C-terminal tail, where several {(S/T)-P-X-(K/R)} motifs are located that are recognized by cyclin-dependent kinases (CDKs). Phosphorylation levels are reported to be lowest during the G1 phase of the cell cycle and increase during S phase and reach maximum levels in mitosis.
Keywords	dJ221C16.2; dJ221C16.5; DmeH1; H1 0 histone; H1; H1 histone family member 0; H1 histone family member 1; H1 histone family member 3; H1 histone family member 5; H1 histone family member N testis specific

GENE INFORMATION

Entrez Gene ID	318854
UniProt ID	P02255

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