anti-Histone H1

Cat #: HM1407
Mouse polyclonal IgG
0.2 μg/μl, store at 4 °C

For research use only

BACKGROUND
Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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. Phosporylation of histone H1 is thought be involved in this process, although the exact nature of this role has yet to be elucidated. Evidence suggests that histone H1 is a part of a general repressor mechanism for stable repression of transcription, but it can also activate transcription of specific genes.

SPECIFICITY
This antibody reacts Histone H1 from a broad range of mammalian species.

It can be use in Western Blotting, immunoprecipitation and immunohistochemistry (including paraffin-embedded sections) .

Molecular weight of Histone H1: 32-33 kDa.

Positive controls: HeLa cells

IMMUNOGEN
Human leukemia biopsy cells.

STORAGE
This antibody is stable for 12 months when stored at 2-8°C.

REFERENCE
1. Hohmann, P. 1983. Phosphorylation of H1 histones. Mol. Cell Biochem. 57: 81-92.
2. Doenecke,D. and Tonjes,R. (1986) Differential distribution of lysine and arginine residues in the closely related histones H1 and H5. Analysis of a human H1 gene. J. Mol. Biol. 187, 461-464.
3. Doenecke, D., et al. 1988. The H1 and core histone subtypes: differential gene expression and varied primary structures. Adv. Enzyme Regul. 27: 107-120.
4. Nilsson, P., et al. 1992. DNA binding of histone H1 is modulated by nucleotides. FEBS Letts. 313: 67-70.
5. Roth, S.Y., et al. 1992. Chromatin condensation: does histone H1 dephosphorylation play a role? Trends Biochem. Sci. 17: 93-98.
6. Albig,W., Drabent,B., Kunz,J., Kalff-Suske,M., Grzeschik,K.H. and Doenecke,D. (1993) All known human H1 histone genes except the H1(0) gene are clustered on chromosome 6. Genomics 16, 649-654
7. Wolffe, A.P. 1997. Histone H1. Int. J. Biochem. Cell Biol. 29: 1463-1466.

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