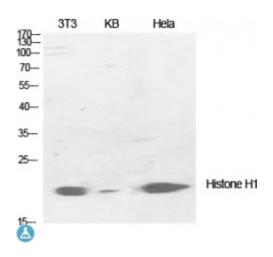


## **Anti-Histone H1 antibody**



**Description** Rabbit polyclonal to Histone H1.

Model STJ93515

**Host** Rabbit

**Reactivity** Human, Mouse

**Applications** ELISA, IF, IHC, WB

**Immunogen** Synthesized peptide derived from human Histone H1 around the non-

phosphorylation site of T17.

Immunogen Region 1-80 aa

**Gene ID** <u>3009</u>

Gene Symbol <u>HIST1H1B</u>

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity Histone H1 Polyclonal Antibody detects endogenous levels of Histone H1

protein.

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

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Histone H1.5 Histone H1a Histone H1b Histone H1s-3

Molecular Weight 31/28 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:4719OMIM:142711</u>

Alternative Names Histone H1.5 Histone H1a Histone H1b Histone H1s-3

**Function** 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 .

**Sequence and Domain Family** The C-terminal domain is required for high-affinity binding to chromatin.

Cellular Localization Nucleus. Chromosome. According to PubMed:15911621 more commonly

found in heterochromatin. According to PubMed:10997781 associates with

actively transcribed chromatin and not heterochromatin.

**Post-translational** H1 histones are progressively phosphorylated during the cell cycle, becoming

maximally phosphorylated during late G2 phase and M phase, and being dephosphorylated sharply thereafter . Phosphorylated at Thr-11 by GSK3B

during mitosis in prometaphase and dephosphorylated in telophase.

Citrullination at Arg-57 (H1R54ci) by PADI4 takes place within the DNAbinding site of H1 and results in its displacement from chromatin and global chromatin decondensation, thereby promoting pluripotency and stem cell

maintenance.

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**Modifications** 

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