

Rabbit Histone H2A Polyclonal Antibody | anti-HIST1H2AG antibody

Histone H2A Antibody

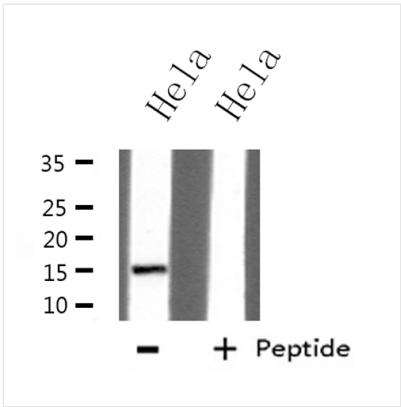
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322210	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Histone H2A; Polyclonal Antibody; Histone H2A Antibody; H2A histone family; member P; H2A.1; H2A.1b; H2A/n; H2A/p; H2A1_HUMAN; H2AF; H2AFC; H2AFD ANDHIST1H2AL; H2AFD; H2AFI; H2AFN ANDHIST1H2AG; H2AFN; H2AFP; HIST1H2AI; HIST1H2AJ; HIST1H2AK; HIST1H2AL; HIST1H2AM; Histone 1; H2ag; Histone cluster 1; Histone H2A type 1; Histone H2A.c/d/i/n/p; Histone H2A/p; pH2A/f; H2A histone family member A; H2A histone family member M; H2A.2; H2A/a; H2A/m; H2A1B_HUMAN; H2AFA; H2AFM; HIST1H2AB; HIST1H2AE; Histone 1 H2ab; Histone 1 H2ae; Histone cluster 1 H2ab; Histone cluster 1 H2ae; Histone H2A type 1-B/E; Histone H2A.2; Histone H2A/a; Histone H2A/m; Histone H2AE; H2a 615; H2A; H2A GL101; H2A/O; H2A/q; H2AFE; H2AFL; H2AFO; H2AFQ; HIST2H2AA; HIST2H2AA3; HIST2H2AB; HIST2H2AC; Histone 2 H2aa3; Histone 2 H2ab; Histone 2 H2ac; Histone H2A type 1 B; Histone H2A type 1 C; Histone H2A type 1 E; Histone H2A type 1 J; MGC74460; anti-HIST1H2AG antibody

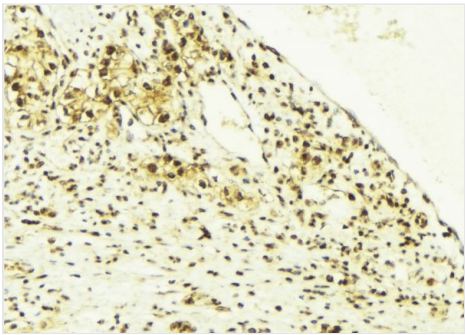
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Histone H2A antibody detects endogenous levels of total Histone H2A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	130
Applicable Applications for anti-HIST1H2AG antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Histone H2A
Subcellular Location	Nucleus. Chromosome.
Predicted Cross Reactivity	Bovine, Xenopus
Similarity	Bovine (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of Histone H2A expression in HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA322210 at 1/100 staining Human breast cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-HIST1H2AG antibody

Function: Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Subunit Structure: The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA. Post-translational Modifications: Deiminated on Arg-4 in granulocytes upon calcium entry. Monoubiquitination of Lys-120 (H2AK119Ub) by RING1, TRIM27 and RNF2/RING2 complex gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. It is involved in the initiation of both imprinted and random X inactivation. Ubiquitinated H2A is enriched in inactive X chromosome chromatin. Ubiquitination of H2A functions downstream of methylation of 'Lys-27' of histone H3 (H3K27me). H2AK119Ub by RNF2/RING2 can also be induced by ultraviolet and may be involved in DNA repair. Monoubiquitination of Lys-120 (H2AK119Ub) by TRIM27 may promote transformation of cells in a number of breast cancers (PubMed:25470042). Following DNA double-strand breaks (DSBs), it is ubiquitinated through 'Lys-63' linkage of ubiquitin moieties by the E2 ligase UBE2N and the E3 ligases RNF8 and RNF168, leading to the recruitment of repair proteins to sites of DNA damage. Ubiquitination at Lys-14 and Lys-16 (H2AK13Ub and H2AK15Ub, respectively) in response to DNA damage is initiated by RNF168 that mediates monoubiquitination at these 2 sites, and 'Lys-63'-linked ubiquitin are then conjugated to monoubiquitin; RNF8 is able to extend 'Lys-63'-linked ubiquitin chains in vitro. Deubiquitinated by USP51 at Lys-14 and Lys-16 (H2AK13Ub and H2AK15Ub, respectively) after damaged DNA is repaired (PubMed:27083998). H2AK119Ub and ionizing radiation-induced 'Lys-63'-linked ubiquitination (H2AK13Ub and H2AK15Ub) are distinct events. Phosphorylation on Ser-2 (H2AS1ph) is enhanced during mitosis. Phosphorylation on Ser-2 by RPS6KA5/MSK1 directly represses transcription. Acetylation of H3 inhibits Ser-2 phosphorylation by RPS6KA5/MSK1. Phosphorylation at Thr-121 (H2AT120ph) by DCAF1 is present in the regulatory region of many tumor suppressor genes and down-regulates their transcription. Symmetric dimethylation on Arg-4 by the PRDM1/PRMT5 complex may play a crucial role in the germ-cell lineage. Glutamine methylation at Gln-105 (H2AQ104me) by FBL is specifically dedicated to polymerase I. It is present at 35S ribosomal DNA locus and impairs binding of the FACT complex (PubMed:24352239). Crotonylation (Kcr) is specifically present in male germ cells and marks testis-specific genes in post-meiotic cells, including X-linked genes that escape sex chromosome inactivation in haploid cells. Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors. It is also associated with post-meiotically activated genes on autosomes. Similarity: Belongs to the histone H2A family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504239
NCBI GeneID	8329
NCBI Accession #	NP_003500.1

NCBI GenBank Nucleotide #	NM_003509.2
UniProt Accession #	P0C0S8; P02261; Q2M1R2; Q76PA6
Molecular Weight	Observed: 14 kDa Predicted: 15 kDa
NCBI Official Full Name	histone H2A type 1
NCBI Official Synonym Full Names	histone cluster 1 H2A family member i
NCBI Official Symbol	HIST1H2AI
NCBI Official Synonym Symbols	H2A/c; H2AFC
NCBI Protein Information	histone H2A type 1
UniProt Protein Name	Histone H2A type 1
UniProt Gene Name	HIST1H2AG
UniProt Synonym Gene Names	H2AFP; H2A.1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/histone-h2a-antibody-immunohistochemistry-western-blot-elisa/322210>