

Rabbit macroH2A.1 Polyclonal Antibody | anti-H2AFY antibody

macroH2A.1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328922	Rabbit	Human, Mouse, RatPredicted Reactivity: Zebrafish(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%), Xenopus(100%)	ELISA, Western Blot

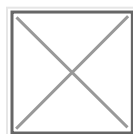
PRODUCT SYNONYMS

macroH2A.1; Polyclonal Antibody; macroH2A.1 Antibody; Core histone macro h2a.1; Core histone macro-H2A.1; H2A histone family member Y; H2A.y; H2A/y; H2AF12M; H2AFJ; H2afy; H2AY_HUMAN; Histone H2A.Y; Histone macroH2A1; Histone macroH2A1.1; Histone macroH2A1.2; Macroh2a1; MACROH2A1.1; MacroH2A1.2; Medulloblastoma antigen MU MB 50.205; Medulloblastoma antigen MU-MB-50.205; mH2a; mH2A1; anti-H2AFY antibody

PRODUCT SPECIFICATIONS

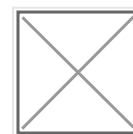
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Zebrafish(100%), Bovine(100%), Horse(100%), Sheep(100%), Rabbit(100%), Dog(100%), Chicken(100%), Xenopus(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	macroH2A.1 Antibody detects endogenous levels of total macroH2A.1.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	371
Applicable Applications for anti-H2AFY antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide derived from human macroH2A.1, corresponding to a region within C-terminal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA328922 staining HepG2 cells(30min of 4uM Forskolin treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25Å°C. Samples were then incubated with primary Ab(AAA328922) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37Å°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



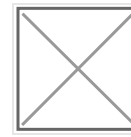
IF (Immunofluorescence)

AAA328922 staining A549 cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25Å°C. Samples were then incubated with primary Ab(AAA328922) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37Å°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI (blue).



WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using macroH2A.1 Antibody. The lane on the left was treated with blocking peptide.



WB (Western Blot)

Western blot analysis of extracts from various samples, using macroH2A.1 Antibody. Lane 1: LOVO, blocked with antigen-specific peptides, Lane 2: LOVO, Lane 3: Mouse brain.

ADDITIONAL INFORMATION

Related Product Information for anti-H2AFY antibody

Function: Variant histone H2A which replaces conventional H2A in a subset of nucleosomes where it represses transcription (PubMed:12718888, PubMed:15621527, PubMed:16428466). 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. Involved in stable X chromosome inactivation (PubMed:15897469). Inhibits the binding of transcription factors, including NF-kappa-B, and interferes with the activity of remodeling SWI/SNF complexes (PubMed:12718888, PubMed:16428466). Inhibits histone acetylation by EP300 and recruits class I HDACs, which induces a hypoacetylated state of chromatin (PubMed:16428466, PubMed:16107708). Binds ADP-ribose and O-acetyl-ADP-ribose, and may be involved in ADP-ribose-mediated chromatin modulation (PubMed:15902274). Increases the expression of genes involved in redox metabolism, including SOD3 (PubMed:23022728). Represses SOD3 gene expression.

Post Translational Modifications: Monoubiquitinated at either Lys-116 or Lys-117. May also be polyubiquitinated. Ubiquitination is mediated by the CUL3/SPOP E3 complex and does not promote proteasomal degradation. Instead, it is required for enrichment in inactive X chromosome chromatin.

Subcellular Location: Nucleus. Chromosome. Note: Enriched in inactive X chromosome chromatin and in senescence-associated heterochromatin.

Tissue Specificity: Widely expressed.

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. Interacts with HDAC1 and HDAC2 (By similarity). Interacts with SPOP. Part of a complex consisting of MACROH2A1, CUL3 and SPOP.

NCBI AND UNIPROT INFORMATION

NCBI GI #	93141020
NCBI GeneID	9555
NCBI Accession #	NP_001035248.1
NCBI GenBank Nucleotide #	NP_001035248.1
UniProt Accession #	O75367
Molecular Weight	Observed Molecular Weight: (Observed)39kD. Predicted Molecular Weight: (Calculated)40kDa.
NCBI Official Full Name	core histone macro-H2A.1 isoform 2
NCBI Official Synonym Full Names	macroH2A.1 histone
NCBI Official Symbol	MACROH2A1
NCBI Official Synonym Symbols	H2A.y; H2A/y; H2AFY; mH2A1; H2AF12M; MACROH2A1.1; macroH2A1.2
NCBI Protein Information	core histone macro-H2A.1
UniProt Protein Name	Core histone macro-H2A.1
UniProt Gene Name	H2AFY

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/macroh2a1-antibody-western-blot-elisa/328922>