

macroH2A.1 Antibody
Rabbit mAb
Catalog # AP91563**Specification**

macroH2A.1 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	075367
Reactivity	Rat
Clonality	Monoclonal

Other Names

H2A.y; H2A/y; H2AF12M; H2AFJ; H2afy; Histone H2A.Y; Histone macroH2A1; Histone macroH2A1.1; Histone macroH2A1.2; mH2a;mH2A1;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	39617 Da

macroH2A.1 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human macroH2A.1
Description	Involved in stable X chromosome inactivation. Inhibits the binding of transcription factors and interferes with the activity of remodeling SWI/SNF complexes. Inhibits histone acetylation by EP300 and recruits class I HDACs, which induces an hypoacetylated state of chromatin.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

macroH2A.1 Antibody - Protein Information

Name MACROH2A1 ([HGNC:4740](#))

Function

Variant histone H2A which replaces conventional H2A in a subset of nucleosomes where it represses transcription (PubMed:12718888, PubMed:15621527, PubMed:16428466)

target="_blank">16428466). Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template (PubMed:15897469). Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability (PubMed:15897469). 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:16107708, PubMed:16428466).

Cellular Location

Nucleus. Chromosome. Note=Enriched in inactive X chromosome chromatin and in senescence-associated heterochromatin (PubMed:15621527, PubMed:15897469, PubMed:9634239). Recruited to DNA damage sites in an APLF-dependent manner (PubMed:21211722, PubMed:29905837).

Tissue Location

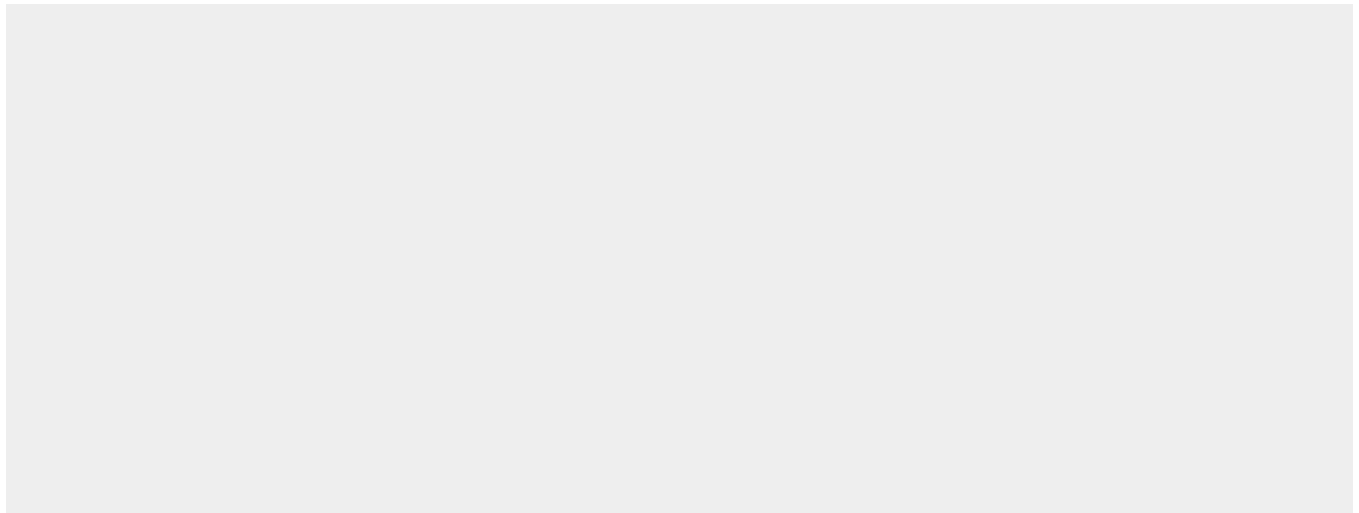
Widely expressed..

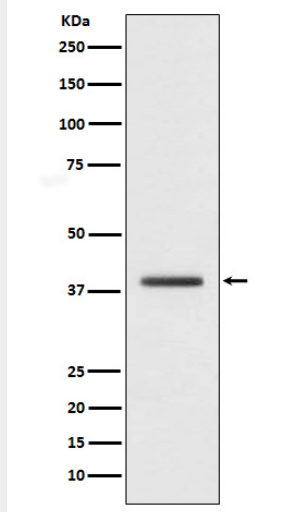
macroH2A.1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

macroH2A.1 Antibody - Images





Western blot analysis of macroH2A.1 expression in HepG2 cell lysate.