Histone macroH2A1 antibody (pAb)

Catalog Nos: 39593, 39594

RRID: AB_2793271
Isotype: Serum
Application(s): ICC, IF, WB
Reactivity: Human, Mouse

Volumes: 200 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 41 kDa

Background: Histone macroH2A (mH2A) is a histone variant that has a region that is similar to histone H2A but has a unique C-terminal domain (the macro domain, also called the non-histone domain (NHD)) in addition to the histone-like region. mH2A associates with condensed chromatin, including the inactive mammalian female X chromosome, senescence-associated heterochromatin foci, imprinted genetic loci, and regions of chromatin that are CpG methylated. *In vitro* assays with mH2A have shown that nucleosomes containing macroH2A are resistant to ATP-dependent chromatin remodeling and transcription factor binding, and that macroH2A is capable of repressing the initiation of RNA pol II catalyzed transcription.

MacroH2A1 consists of two isoforms, macroH2A1.1 and macroH2A1.2, that are produced by alternative splicing; they differ by only 30 amino acids in the C-terminal non-histone domain (NHD).

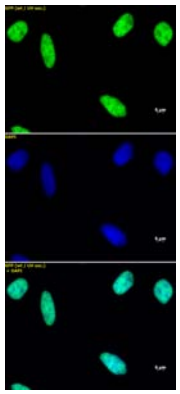
Immunogen: This Histone macroH2A1 antibody was raised against recombinant protein corresponding to the N-terminal half of mouse macroH2A1.2, so will react with macroH2A1 and the macroH2A1.1 and macroH2A1.2 isoforms.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

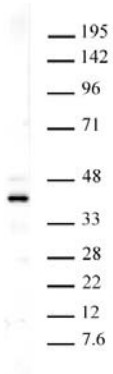
Application Notes:
Applications Validated by Active Motif:
ICC/IF: 1:250 - 1:1,000 dilution
WB: 1:1,000 - 1:2,500 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Histone macroH2A1 pAb tested by immunofluorescence.
Staining of HeLa cells with Histone macroH2A1 pAb (1:1,000 dilution, top panel) and DAPI (middle panel), and a merge of both images (bottom panel).



Histone macroH2A1 pAb tested by Western blot.
HeLa nuclear extract (20 µg per lane) was probed with Histone macroH2A1 pAb at a dilution of 1:2,000.