

Histone H2A.J antibody (pAb)

Catalog Nos: 61793, 61794

RRID: AB_2793769

Isotype: IgG

Application(s): DB, WB Reactivity: Human, Mouse

Volumes: 100 μl, 10 μl **Purification:** Affinity Purified

Host: Rabbit

Background: Histone H2A is one of the core components of the nucleosome.

The **nucleosome** is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of **Histone H2A**, Histone H2B, Histone H3and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points, and is responsible for establishing higher-order chromatin structure. Histone H2A.J is a histone H2A variant, a protein similar to canonical H2A but with different molecular identity and unique functions. Histone H2A.J, which is found only in mammals, is shown to be associated with senescence, accumulating in senescent fibroblasts and promoting expression of inflammatory genes. Therefore, H2A.J may contribute to chronic inflammation and age-related diseases.

Immunogen: This antibody was raised against a peptide comprising amino acids 122 -129 of human Histone H2A.J.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

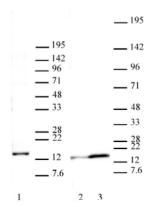
WB*: 1:500 - 1:2500 dilution

DB: 1:1000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western Blot.

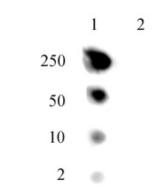
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product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

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



Western blot of Histone H2A.J pAb.

 $20~\mu g$ Nuclear Extract of HeLa cells (Lane 1) or $40~\mu g$ mouse 3T3-L1 cells before (Lane 2) or following stimulation for 12 days with a defined hormonal mixture (DMSO, dexamethasone, insulin, and IBMX) resulting in differentiation into adipocytes (Lane 3). MW:14kD



Dot blot of Histone H2A.J pAb.

Dot blot analysis was used to confirm the specificity of Histone H2A.J antibody. Lane 1: H2A.J peptide. Lane 2: H2A peptide comprised of a.a. 114-126 of human Histone H2A.