

## Histone H2Av antibody (mAb)

**Catalog Nos:** 61751, 61752

**RRID:** AB\_2793757

**Clone:** 10E9.D1

**Isotype:** IgG2a

**Application(s):** ChIP, WB

**Reactivity:** Drosophila

**Quantities:** 100 µg, 10 µg

**Purification:** Protein A Chromatography

**Host:** Mouse

**Concentration:** 1 µg/µl

**Molecular Weight:** 15 kDa

**Background:** 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 H3 and Histone H4). Histone H2A.Z (H2AZ, H2AFZ) is a histone H2A variant, a protein similar to canonical H2A but with different molecular identity and unique functions. H2A.Z is highly conserved during evolution. It plays an important role in basic cellular mechanisms such as gene activation, chromosome segregation, heterochromatic silencing and progression through the cell cycle. In *Drosophila*, the H2A variant corresponding to H2AZ is H2Av. H2Av is an essential protein in *Drosophila* and has been implicated in both activation and repression of transcription. H2Av is localized to centromeric heterochromatin in *Drosophila* and flies lacking H2Av have reduced levels of heterochromatin components at the centromeres. However, H2Av nucleosome distribution throughout the rest of the *Drosophila* genome correlates with genes that have an open and uniform chromatin architecture at promoter regions.

**Immunogen:** This antibody was raised against a peptide in the C-terminus of the *Drosophila melanogaster* Histone variant H2Av.

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

**Application Notes:**

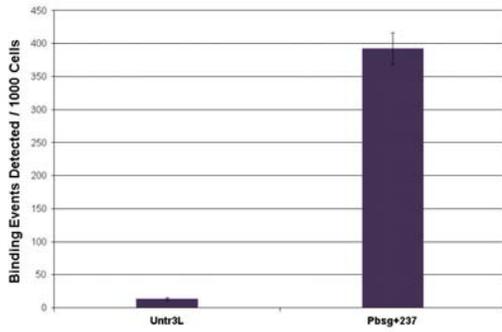
Applications Validated by Active Motif:

ChIP: 5 µg per ChIP

WB: 0.5 - 2 µg/ml dilution

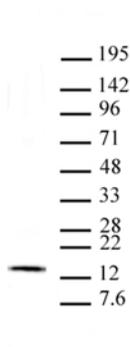
**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This 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 H2Av antibody (mAb) tested by ChIP.**

ChIP was performed using the ChIP-IT<sup>®</sup> High Sensitivity Kit (Cat. No. 53040) with chromatin from *Drosophila* cells and 5 µg of H2Av antibody. ChIP DNA was used in qPCR with the control primer pairs or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.



**Histone H2Av antibody (mAb) tested by Western blot.**

Detection of Histone H2Av by Western blot. The analysis was performed using Schneider's *Drosophila* L2 nuclear extract (20µg) and the Histone H2Av antibody at a dilution of 1µg/ml.