

## HP1 $\alpha$ antibody (pAb)

**Catalog Nos:** 39295, 39296

**RRID:** AB\_2255953

**Isotype:** Serum

**Application(s):** WB

**Reactivity:** Human, Mouse

**Volumes:** 200  $\mu$ l, 10  $\mu$ l

**Purification:** None

**Host:** Rabbit

**Molecular Weight:** 24 kDa

**Background:** HP1 (Heterochromatin protein 1) is a chromosomal protein that participates in both chromatin packaging and gene silencing. Three HP1 isoforms ( $\alpha$ ,  $\beta$  and  $\gamma$ ) occur in mammals. The chromodomain (Chromatin Organization Modifier) of HP1 $\alpha$  is responsible for binding to Histone H3 methyl Lys9, although additional factors are required to specify the HP1 targeting. The chromoshadow domain mediates interactions with a number of nuclear proteins, including SuvH39 (a Histone H3 Lysine methyltransferase), the DNA methyltransferases DNMT1 and DNMT3A or the large subunit of the chromatin assembly factor-1 (CAF-1). Dysfunction of HP1 $\alpha$  plays a critical role in tumorigenesis, and is implicated in the invasive/metastatic phenotype of breast cancer.

**Immunogen:** This HP1 alpha antibody was raised against a recombinant protein corresponding to full-length recombinant mouse HP1 alpha.

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

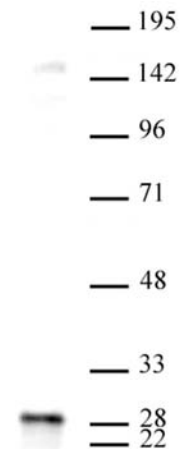
### Application Notes:

Applications Validated by Active Motif:

WB: 1:500 - 1:1,000 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.



### HP1 alpha pAb tested by Western blot.

Detection of HP1 alpha by Western blot analysis. Nuclear extract of HeLa cells (20  $\mu$ g/lane) stained with HP1 alpha pAb at a 1:1,000 dilution.