



## Rabbit Anti-phospho-HP1 alpha (Ser92) antibody

SL17373R

|                               |  |
|-------------------------------|--|
| <b>Product Name:</b>          | phospho-HP1 alpha (Ser92)  |
| <b>Chinese Name:</b>          | 磷酸化异染色质蛋白1抗体   |
| <b>Alias:</b>                 | HP1 alpha (phospho S92); p-HP1 alpha (phospho S92); Antigen p25; Cbx 5; CBX5; CBX5_HUMAN; CG8409; Chromobox homolog 5 (Drosophila HP1 alpha); Chromobox homolog 5 (HP1 alpha homolog Drosophila); Chromobox homolog 5 (HP1 alpha homolog, Drosophila); Chromobox homolog 5; Chromobox protein homolog 5; Chromobox protein homologue 5; Heterochromatin protein 1 alpha; Heterochromatin protein 1; Heterochromatin protein 1 homolog alpha; HP 1; HP 1A; HP1 alpha; HP1 alpha homolog; HP1; HP1A; HP1Hs alpha; HP1Hs-alpha; Su(var)205. |
| <b>Organism Species:</b>      | Rabbit   |
| <b>Clonality:</b>             | Polyclonal   |
| <b>React Species:</b>         | Human,Dog,Pig,Cow,Horse,Sheep,   |
| <b>Applications:</b>          | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.   |
| <b>Molecular weight:</b>      | 22kDa  |
| <b>Cellular localization:</b> | The nucleus  |
| <b>Form:</b>                  | Lyophilized or Liquid  |
| <b>Concentration:</b>         | 1mg/ml   |
| <b>immunogen:</b>             | KLH conjugated synthesised phosphopeptide derived from human HP1 alpha around the phosphorylation site of Ser92:RK(p-S)NF  |
| <b>Lsotype:</b>               | IgG  |
| <b>Purification:</b>          | affinity purified by Protein A   |
| <b>Storage Buffer:</b>        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.   |
| <b>Storage:</b>               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.  |

**PubMed:**[PubMed](#)

HP1 alpha is a component of heterochromatin. It recognizes and binds histone H3 tails methylated at Lys-9, leading to epigenetic repression. HP1 alpha may interact with lamin B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. HP1 proteins are relatively small proteins (~25 kDa) with a conserved amino-terminal chromo domain and a structurally related carboxy-terminal motif, the chromo shadow domain. Both domains of HP1 are required for binding to native chromatin in vivo, but they contribute differentially to binding in euchromatin and heterochromatin.

**Function:**

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

**Subcellular Location:**

Nucleus. Chromosome. Chromosome > centromere. Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.

**Product Detail:****Post-translational modifications:**

Phosphorylation of HP1 and LBR may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle (By similarity). Phosphorylated during interphase and possibly hyperphosphorylated during mitosis.

Ubiquitinated.

**Similarity:**

Contains 2 chromo domains.

**SWISS:**

P45973

**Gene ID:**

23468

**Database links:**

[Entrez Gene: 23468](#) Human

[Entrez Gene: 12419](#) Mouse

[Omim: 604478](#) Human

[SwissProt: P45973](#) Human

[SwissProt: Q61686](#) Mouse

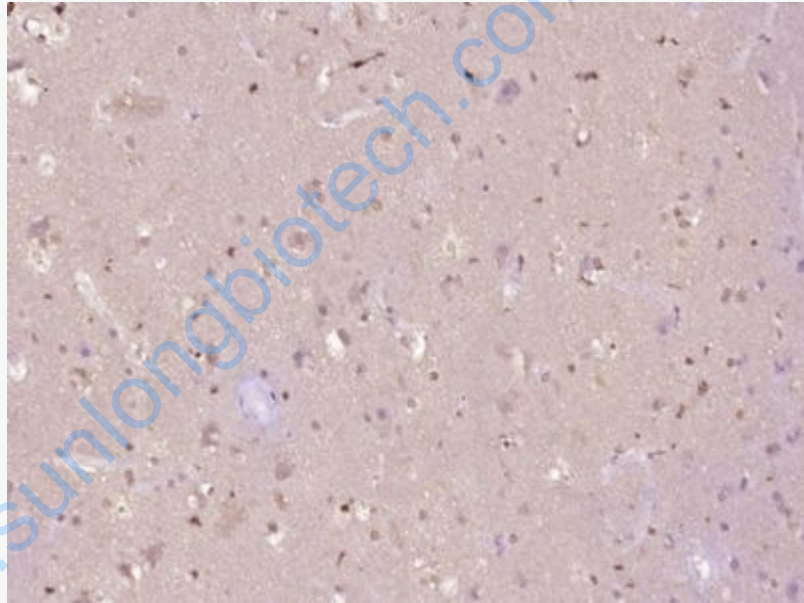
[Unigene: 349283](#) Human

[Unigene: 262059](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-HP1 alpha (Ser92)) Polyclonal Antibody, Unconjugated (SL17373R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.