

**HP1α (phospho Ser92) Polyclonal Antibody**

<b>Catalog No :</b>	YP1073
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	IHC;IF;ELISA
<b>Target :</b>	HP1α
<b>Gene Name :</b>	CBX5
<b>Protein Name :</b>	Chromobox protein homolog 5
<b>Human Gene Id :</b>	23468
<b>Human Swiss Prot No :</b>	P45973
<b>Mouse Swiss Prot No :</b>	Q61686
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human HP1 alpha around the phosphorylation site of Ser92. AA range:58-107
<b>Specificity :</b>	Phospho-HP1α (S92) Polyclonal Antibody detects endogenous levels of HP1α protein only when phosphorylated at S92.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	22kD

**Background :**

This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family. The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, and a C-terminal chromo shadow-domain (CSD) which is responsible for the homodimerization and interaction with a number of chromatin-associated nonhistone proteins. The encoded product is involved in the formation of functional kinetochore through interaction with essential kinetochore proteins. The gene has a pseudogene located on chromosome 3. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Jul 2008],

**Function :**

function:Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. 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.,PTM: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 hyper-phosphorylated during mitosis.,similarity:Contains 2 chromo domains.,subcellular location:Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.,

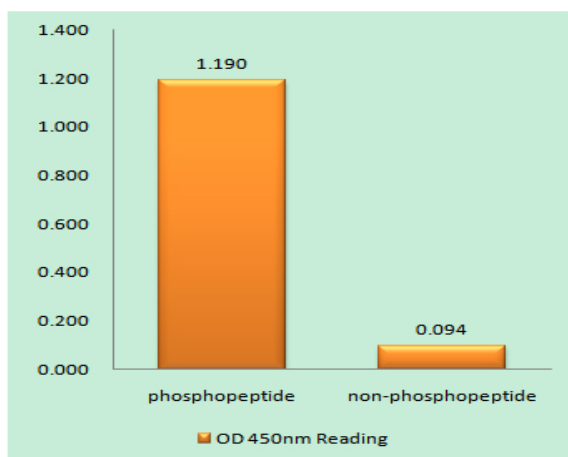
**Subcellular Location :**

Nucleus . Chromosome . Chromosome, centromere . Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase. .

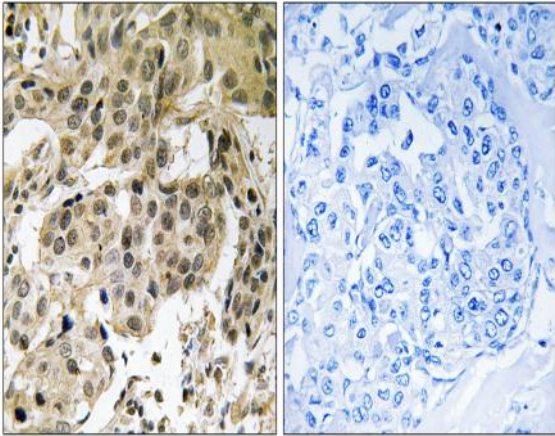
**Expression :**

Epithelium,Fetal brain cortex,Placenta,

## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HP1 alpha (Phospho-Ser92) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using HP1 alpha (Phospho-Ser92) Antibody. The picture on the right is blocked with the phospho peptide.