Immunoway
Best Tools for immunology Research

HP1α Monoclonal Antibody

Catalog No :	YM1045
Reactivity :	Human;Mouse;Rat;Bovine;Dog;Pig
Applications :	WB;IF
Target :	HP1α
Gene Name :	CBX5
Protein Name :	Chromobox protein homolog 5
Human Gene Id :	23468
Human Swiss Prot No :	P45973
Mouse Gene Id :	12419
Mouse Swiss Prot No :	Q61686
Immunogen :	Purified recombinant human HP1α protein fragments expressed in E.coli.
Specificity :	HP1α Monoclonal Antibody detects endogenous levels of HP1α protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:1000 - 1:2000. IF 1:100 - 1:500. Not yet tested in other applications.
Purification :	Affinity purification
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	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.,

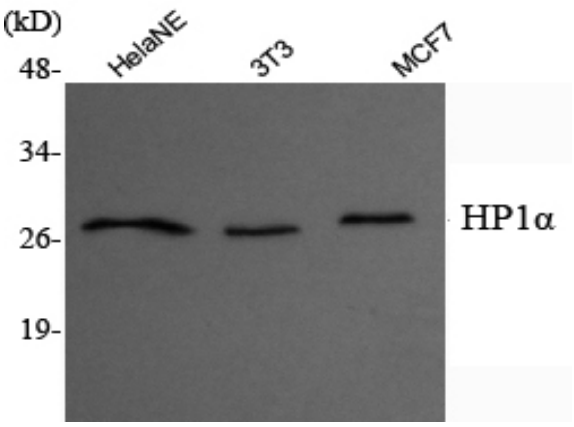
Subcellular Location :

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



Western Blot analysis using HP1α Monoclonal Antibody against HeLa nuclear extract, 3T3, MCF7 whole cell lysate.