



HP1α Monoclonal Antibody

Catalog No	YP-Ab-01041
Isotype	IgG
Reactivity	Human;Mouse;Rat;Bovine;Dog;Pig
Applications	WB;IF
Gene Name	CBX5
Immunogen	Purified recombinant human HP1α protein fragments expressed in E.coli.
Specificity	HP1α Monoclonal Antibody detects endogenous levels of HP1α protein.
Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Antigen p25;CBX5;CBX5_HUMAN;CG8409;Chromobox 5;Chromobox homolog 5 (HP1 alpha homolog;Drosophila);Chromobox homolog 5;Chromobox protein homolog 5;Epididymis luminal protein 25;HEL25;Heterochromatin protein 1 alpha;Heterochromatin protein 1;Heterochromatin protein 1 homolog alpha;HP1 alpha;HP1 alpha homolog;HP1;HP1A;HP1Hs alpha;Su(var)205;HP1α
Observed Band	
Calculated Molecular Weight	
Cell Pathway	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. .
Tissue Specificity	Epithelium,Fetal brain cortex,Placenta,
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.,

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],

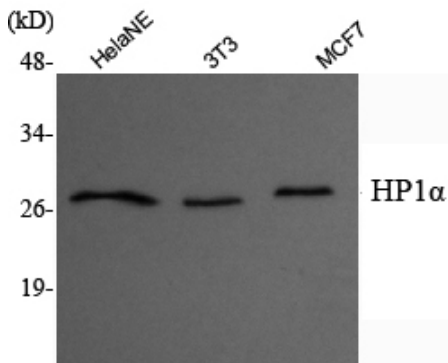
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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