



HP1 α Polyclonal Antibody

Catalog No	BYab-01813
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	CBX5
Protein Name	Chromobox protein homolog 5
Immunogen	The antiserum was produced against synthesized peptide derived from human CBX5. AA range:41-90
Specificity	HP1 α Polyclonal Antibody detects endogenous levels of HP1 α protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	CBX5; HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha
Observed Band	22kD
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

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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!

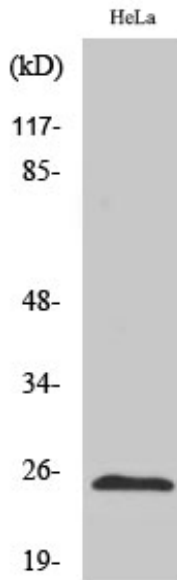
Usage suggestions

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

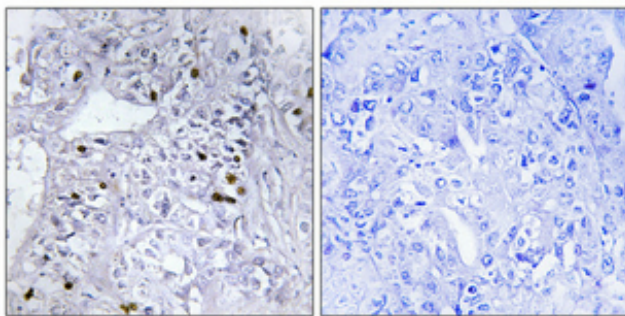
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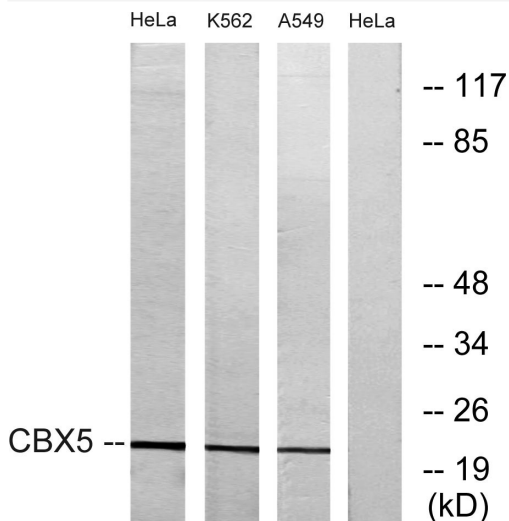
Products Images



Western Blot analysis of various cells using HP1 α Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4 $^{\circ}$ overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from HeLa, A549, and K562 cells, using CBX5 Antibody. The lane on the right is blocked with the synthesized peptide.

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