

**Product Name: HP1 $\alpha$  Rabbit Polyclonal Antibody**  
**Catalog #: APRab12185**



## Summary

<b>Production Name</b>	HP1 $\alpha$ Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	CBX5
<b>Alternative Names</b>	CBX5; HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha
<b>Gene ID</b>	23468.0
<b>SwissProt ID</b>	P45973.The antiserum was produced against synthesized peptide derived from human CBX5. AA range:41-90

## Application

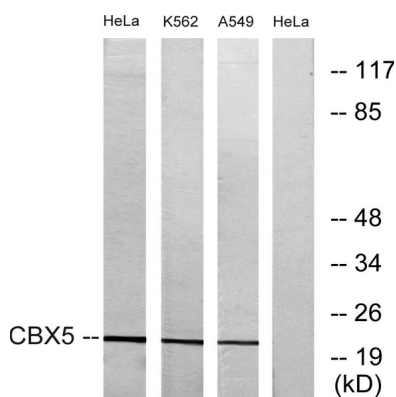
<b>Dilution Ratio</b>	WB 1:500-1:2000, IHC-P 1:100-1:300, IF-P/IF-F/ICC/IF 1:200-1:1000, ELISA 1:20000.Not yet tested in other applications.
<b>Molecular Weight</b>	22kDa

## 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 chromoshadow-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: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.,subunit:Interacts with SUV420H1 and SUV420H2 (By similarity). Interacts directly with ATRX, CHAF1A, LBR, NIPBL, SP100, STAM2 and TRIM28 via the chromoshadow domain. Can interact directly with CBX3 via the chromoshadow domain. Interacts with histone H3 methylated at 'Lys-9'. Interacts with MIS12 and C20orf127. Interacts with HP1BP3.,

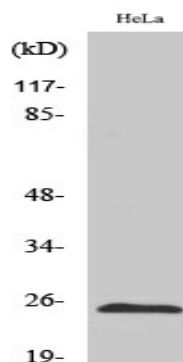
## Research Area

## Image Data

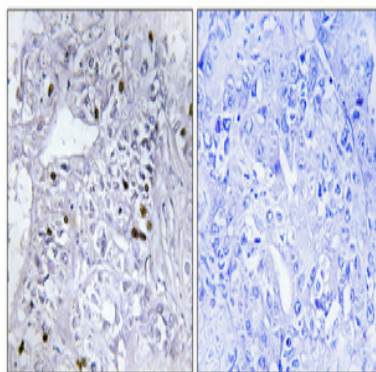


Western blot analysis of lysates from HeLa, A549, and K562 cells, using CBX5 Antibody. The lane on the right is blocked with the synthesized peptide.

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Western Blot analysis of various cells using HP1 $\alpha$  Polyclonal Antibody diluted at 1: 1000



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

## **Note**

For research use only.