

# HP1α Polyclonal Antibody

Catalog # AP70406

#### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** P45973

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW22225

#### **Additional Information**

**Gene ID** 23468

Other Names CBX5; HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin

protein 1 homolog alpha; HP1 alpha

Dilution WB~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. IHC-P~~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. IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name CBX5

Synonyms HP1A

**Function** Component of heterochromatin that recognizes and binds histone H3 tails

methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph) (PubMed:19783980). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR) (PubMed:19783980). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1 (PubMed:19783980, PubMed:20231385). Required for the formation of the

inner centromere (PubMed: 20231385).

**Cellular Location** Nucleus. Chromosome, centromere. Note=Colocalizes with

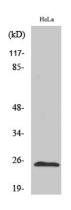
HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and

pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

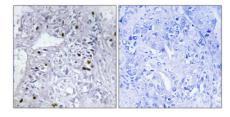
## **Background**

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). 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.

### **Images**



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,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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