

HP1 alpha Antibody

Purified Mouse Monoclonal Antibody (Mab)
 Catalog # AP53281-100 □

Specification

HP1 alpha Antibody - Product Information

Application	WB, ICC, IHC
Primary Accession	P45973
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	26 KDa

HP1 alpha Antibody - Additional Information

Gene ID 23468

Other Names

Antigen p25;Cbx 5;Cbx5;CBX5_HUMAN;CG8409;Chromobox homolog 5 (Drosophila HP1 alpha); Chromobox homolog 5 (HP1 alpha homolog Drosophila); Chromobox homolog 5 (HP1 alpha homolog, Drosophila); Chromobox homolog 5; Chromobox protein homolog 5; Chromobox protein homologue 5; Heterochromatin protein 1 alpha; Heterochromatin protein 1; Heterochromatin protein 1 homolog alpha; HP 1; HP 1A; HP1 alpha; HP1 alpha homolog; HP1; HP1A; HP1Hs alpha; Su(var)205.

Dilution

WB~~1:1000
 ICC~~1:300
 IHC~~1:100

Format

Purified mouse monoclonal antibody in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.02% sodium azide, 50% glycerol

Storage

Store at -20 °C. Stable for 12 months from date of receipt

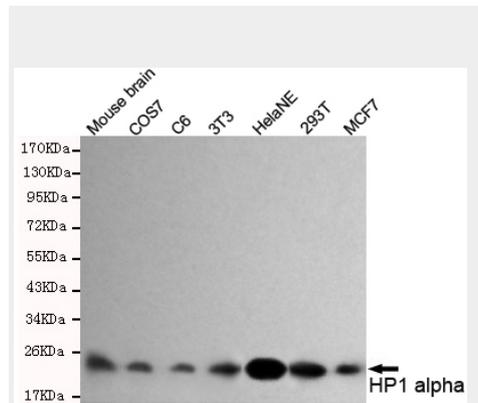
HP1 alpha Antibody - Protein Information

Name CBX5

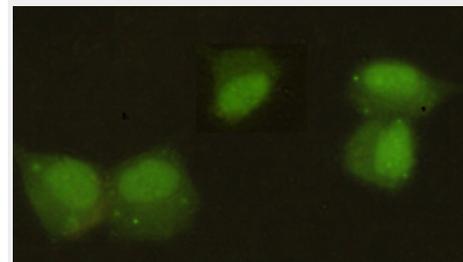
Synonyms HP1A

Function

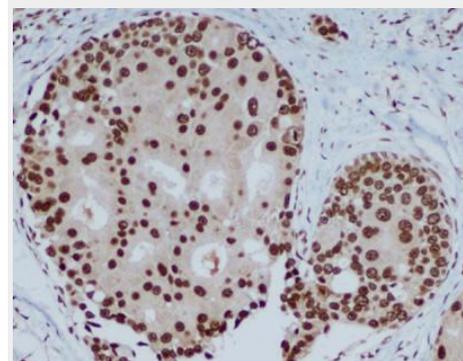
Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction



Western blot detection of HP1 alpha in MCF7,293T,HeLaNE,3T3,C6,COS7 and Mouse brain lysates and using HP1 alpha mouse mAb (1:1000 diluted). Predicted band size: 22KDa. Observed band size: 22KDa



Immunocytochemistry stain of HeLa using HP1 alpha mouse mAb (1:300).



Immunohistochemical analysis of paraffin-embedded human breast carcinoma with HP1 alpha mouse mAb (3G2-H10-A6, 1:400 diluted), showing nuclear localization. A high pressure mediated antigen retrieval step was performed in citrat buffer (pH6.0).

with MIS12 complex proteins.

Cellular Location

Nucleus. Chromosome. 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

HP1 alpha Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [□Western Blot](#)
- [□Blocking Peptides](#)
- [□Dot Blot](#)
- [□Immunohistochemistry](#)
- [□Immunofluorescence](#)
- [□Immunoprecipitation](#)
- [□Flow Cytometry](#)
- [□Cell Culture](#)

HP1 alpha Antibody - 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.

HP1 alpha Antibody - References

Saunders W.S., et al. J. Cell Sci. 104:573-582(1993). Ota T., et al. Nat. Genet. 36:40-45(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDJB databases. Ye Q., et al. J. Biol. Chem. 271:14653-14656(1996). Lubec G., et al. Submitted (DEC-2008) to UniProtKB.