

HP1 alpha Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51050

Specification

HP1 alpha Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, IP, ICC, IHC-P, E P45973 Human, Mouse, Rat Rabbit

25 KDa

Polyclonal

HP1 alpha Antibody - Additional Information

Gene ID 23468

Other Names

Chromobox protein homolog 5, Antigen p25, Heterochromatin protein 1 homolog alpha, HP1 alpha, CBX5, HP1A

Dilution

WB~~1:1000 IP~~N/A ICC~~N/A IHC-P~~N/A E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

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) (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:<a

 $href="http://www.uniprot.org/citations/19783980" target="_blank">19783980, PubMed:20231385). Required for the formation of the inner centromere (PubMed:<a$

href="http://www.uniprot.org/citations/20231385" target=" blank">20231385).

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 (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

HP1 alpha Antibody - Images

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/DDBJ databases.

Ye Q., et al.J. Biol. Chem. 271:14653-14656(1996).

Lubec G., et al. Submitted (DEC-2008) to UniProtKB.