

HP1 alpha Antibody

Rabbit mAb

Catalog # AP90505

Product Information

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| Application | WB, IHC, IF, FC, ICC, IP, IHF |
| Primary Accession | P45973 |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Other Names | CBX5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha; |
| Isotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 22225 |

Additional Information

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|-------------------------------------|---|
| Dilution | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1: 50 |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human HP1 alpha |
| Description | 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. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

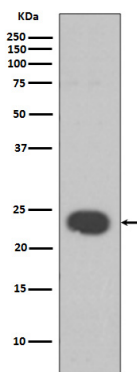
Protein Information

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|-----------------|--|
| 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. 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)

Images



Western blot analysis of HP1 alpha expression in SH-SY5Y cell lysate.

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