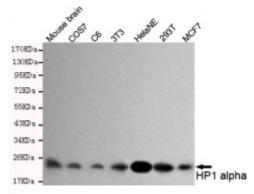


Anti-HP1-alpha antibody





Description Mouse monoclonal to HP1-alpha.

Model STJ99039

Host Mouse

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Purified recombinant human HP1 alpha protein fragments expressed in E.coli.

Gene ID 23468

Gene Symbol <u>CBX5</u>

Dilution range WB 1:500-2000ELISA 1:10000-20000

Specificity This antibody detects endogenous levels of HP1 alpha and does not cross-

react with related proteins.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Clone ID 3G2-H10-A6

Note For Research Use Only (RUO).

Protein Name Chromobox protein homolog 5 Antigen p25 Heterochromatin protein 1

homolog alpha HP1 alpha

Molecular Weight 26kDa

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG2b

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1555OMIM:604478</u>

Alternative Names Chromobox protein homolog 5 Antigen p25 Heterochromatin protein 1

homolog alpha HP1 alpha

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 with MIS12 complex proteins.

Cellular Localization Nucleus Chromosome Chromosome, centromere. Component of centromeric

and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and

anaphase.

Post-translational 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 . Phosphorylated during interphase and

possibly hyper-phosphorylated during mitosis. Ubiquitinated.

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Modifications

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