

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1303

Product Information

Application	WB, FC, ICC
Primary Accession	P45973
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB2865
Calculated MW	22225
Gene Name	CBX5
Aliases	CBX5; Chromobox ; HP1-ALPHA; HP1; Chromobox Homolog 5 (HP1 Alpha Homolog, Drosophila); Heterochromatin Protein 1 Homolog Alpha; Chromobox Protein Homolog 5; HP1Hs-Alpha; Antigen P25; HP1alpha; HP1A; Chromobox Homolog 5 (Drosophila HP1 Alpha); Heterochromatin Protein 1-Alpha; HP1 Alpha Homolog (Drosophila); Epididymis Luminal Protein 25; Chromobox Homolog 5; HP1 Alpha Homolog; HP1Hs Alpha; HP1 Alpha; HEL25
Immunogen	A synthesized peptide derived from human HP1 alpha

Additional Information

Gene ID	23468
Other Names	Chromobox protein homolog 5, Antigen p25, Heterochromatin protein 1 homolog alpha, HP1 alpha, CBX5, HP1A

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 (PubMed: 40440427). In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph) (PubMed: 19783980). Also recognizes and binds histone H1.4 methylated at 'Lys-26' (H1.4K26me) (PubMed: 16127177). Excluded from chromatin when histone H1.4 is Simultaneously methylated at Lys-26 (H1.4K26me) and phosphorylated at Ser-27 (H1.4S27Ph) (PubMed: 16127177). 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 (PubMed:40440427). Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666).

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