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Mouse Cbx5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19229b

Product Information

Application	WB, E
Primary Accession	Q61686
Other Accession	P45973, NP_001070257.1
Reactivity	Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40179
Calculated MW	22186
Antigen Region	160-186

Additional Information

Gene ID	12419
Other Names	Chromobox protein homolog 5, Heterochromatin protein 1 homolog alpha, HP1 alpha, Cbx5, Hp1a
Target/Specificity	This Mouse Cbx5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 160-186 amino acids from the C-terminal region of mouse Cbx5.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Cbx5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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) (By similarity). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR) (By similarity). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1 (By similarity). Required for the formation of the inner centromere (By similarity).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:P45973}. Chromosome {ECO:0000250|UniProtKB:P45973}. Chromosome, centromere {ECO:0000250|UniProtKB:P45973}. Note=Colocalizes with HNRNPU in the nucleus (By similarity). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase. Localizes to sites of DNA damage. {ECO:0000250|UniProtKB:P45973}

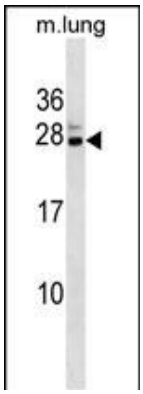
Background

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 (By similarity).

References

Sun, Y., et al. Biophys. J. 99(4):1274-1283(2010)
Muller, K.P., et al. Biophys. J. 97(11):2876-2885(2009)
Dong, K.B., et al. EMBO J. 27(20):2691-2701(2008)
Villeneuve, L.M., et al. Proc. Natl. Acad. Sci. U.S.A. 105(26):9047-9052(2008)
Brancorsini, S., et al. Cell Cycle 7(10):1415-1422(2008)

Images



Mouse Cbx5 Antibody (C-term) (Cat. #AP19229b) western blot analysis in mouse lung tissue lysates (35ug/lane).This demonstrates the Cbx5 antibody detected the Cbx5 protein (arrow).