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CBX2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17146c

Product Information

Application	WB, E
Primary Accession	Q14781
Other Accession	P30658, NP_005180.1, NP_116036.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35885
Calculated MW	56081
Antigen Region	137-166

Additional Information

Gene ID	84733
Other Names	Chromobox protein homolog 2, CBX2
Target/Specificity	This CBX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 137-166 amino acids from the Central region of human CBX2.
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	CBX2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CBX2
Function	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development (PubMed:21282530). PcG PRC1 complex acts via chromatin remodeling and

	modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:21282530). Binds to histone H3 trimethylated at 'Lys-9' (H3K9me3) or at 'Lys-27' (H3K27me3) (By similarity). Plays a role in the lineage differentiation of the germ layers in embryonic development (By similarity). Involved in sexual development, acting as activator of NR5A1 expression (PubMed:19361780).
Cellular Location	Nucleus. Chromosome Note=Localized in distinct foci on chromatin and in chromocenters Localizes to the inactive X chromosome. Seems to be recruited to H3K27me3, H3K9ac and H3K3me2 sites on chromatin

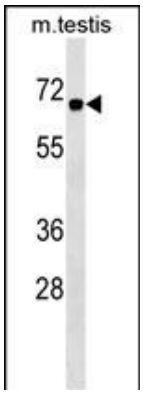
Background

This gene encodes a component of the polycomb multiprotein complex, which is required to maintain the transcriptionally repressive state of many genes throughout development via chromatin remodeling and modification of histones. Disruption of this gene in mice results in male-to-female gonadal sex reversal. Mutations in this gene are also associated with gonadal dysgenesis in humans. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

References

Biason-Lauber, A., et al. Am. J. Hum. Genet. 84(5):658-663(2009)
Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)
Agrawal, N., et al. PLoS ONE 3 (12), E4032 (2008) :
Garcia, E., et al. EMBO J. 18(12):3404-3418(1999)
Katoh-Fukui, Y., et al. Nature 393(6686):688-692(1998)

Images



CBX2 Antibody (Center) (Cat. #AP17146c) western blot analysis in mouse testis tissue lysates (35ug/lane).This demonstrates the CBX2 antibody detected the CBX2 protein (arrow).