

CBX2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17146c

Specification

CBX2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O14781</u> <u>P30658</u>, <u>NP_005180.1</u>, <u>NP_116036.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 56081 137-166

CBX2 Antibody (Center) - 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

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.

CBX2 Antibody (Center) - 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:<u>21282530</u>). 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:<u>21282530</u>). 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:<u>19361780</u>).

Cellular Location

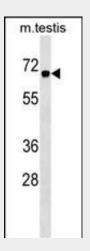
Nucleus. Chromosome Note=Localized in distinct foci on chromatin and in chromocenters Localizes to the inactive X chromosome. Seems to be recruited to H3K27me3, H3K9ac and H3K3me2 sites on chromatin

CBX2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CBX2 Antibody (Center) - 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).

CBX2 Antibody (Center) - 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.



CBX2 Antibody (Center) - 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)