

# CBX2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17146c

### **Product Information**

Application WB, E Primary Accession Q14781

Other Accession <u>P30658</u>, <u>NP 005180.1</u>, <u>NP 116036.1</u>

**Reactivity** Human, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB35885Calculated MW56081Antigen Region137-166

## **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

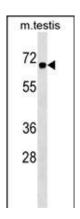
# **Background**

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.