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CBX2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2139a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q14781
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	4C11B10
Isotype	IgG1
Calculated MW	56081
Description	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.
Immunogen	Purified recombinant fragment of human CBX2 (AA: 402-525) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	84733
Other Names	Chromobox protein homolog 2, CBX2
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CBX2 Antibody 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

References

1.Br J Cancer. 2014 Oct 14;111(8):1663-72.2.Fertil Steril. 2013 Mar 1;99(3):819-826.

Images