

#### **CBX2 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO2138a

# Specification

CBX2 Antibody - Product Information

Application	E, WB
Primary Accession	<u>Q14781</u>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	lgG1
Calculated MW	56kDa KDa
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

CBX2 Antibody - Additional Information

Gene ID 84733

**Other Names** Chromobox protein homolog 2, CBX2

**Dilution** E~~1/10000 WB~~1/500 - 1/2000

## 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.

CBX2 Antibody - 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:<a href="http://www .uniprot.org/citations/21282530" target="\_blank">21282530</a>). PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiguitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:<a href="http://www.uniprot.org/c itations/21282530" target="\_blank">21282530</a>). 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:<a href="http://www.uniprot.org/citations/1936 1780" target=" blank">19361780</a>).

#### **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 - 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
  Cell Culture