

**CBX5 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2181a****Specification****CBX5 Antibody - Product Information**

Application	E, WB, IF, IHC
Primary Accession	<a href="#">P45973</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	22.2kDa KDa

**Description**

This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family. The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, and a C-terminal chromo shadow-domain (CSD) which is responsible for the homodimerization and interaction with a number of chromatin-associated nonhistone proteins. The encoded product is involved in the formation of functional kinetochore through interaction with essential kinetochore proteins. The gene has a pseudogene located on chromosome 3. Multiple alternatively spliced variants, encoding the same protein, have been identified.

**Immunogen**

Purified recombinant fragment of human CBX5 (AA: 1-191) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CBX5 Antibody - Additional Information**

**Gene ID** 23468

**Other Names**

Chromobox protein homolog 5, Antigen p25, Heterochromatin protein 1 homolog alpha, HP1 alpha, CBX5, HP1A

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/200 - 1/1000  
IHC~~1/200 - 1/1000

**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**

CBX5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **CBX5 Antibody - Protein Information**

**Name** CBX5

**Synonyms** HP1A

### **Function**

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

### **Cellular Location**

Nucleus. Chromosome. Chromosome, centromere Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346) Component of centromeric and pericentromeric heterochromatin Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346) Localizes to sites of DNA damage (PubMed:28977666)

## **CBX5 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)