10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# CBX1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2063a

## Product Information

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|---|---|
| **Application** | WB, IHC, FC, ICC, E |
| **Primary Accession** | P83916 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 4D7B8 |
| **Isotype** | IgG1 |
| **Calculated MW** | 21418 |
| **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 protein may play an important role in the epigenetic control of chromatin structure and gene expression. Several related pseudogenes are located on chromosomes 1, 3, and X. Multiple alternatively spliced variants, encoding the same protein, have been identified. |
| **Immunogen** | Purified recombinant fragment of human CBX1 (AA: 1-185) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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| **Gene ID** | 10951 |
| **Other Names** | Chromobox protein homolog 1, HP1Hsbeta, Heterochromatin protein 1 homolog beta, HP1 beta, Heterochromatin protein p25, M31, Modifier 1 protein, p25beta, CBX1, CBX |
| **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** | CBX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | CBX1 |
| **Synonyms** | CBX |
| **Function** | Component of heterochromatin, which recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression (PubMed:41094145). Also recognizes and binds histone H1.4 methylated at 'Lys-26' (H1.4K26me) (PubMed:16127177). Excluded from chromatin when histone H1.4 is Simultaneously methylated at Lys-26 (H1.4K26me) and phosphorylated at Ser-27 (H1.4S27Ph) (PubMed:16127177). Interaction with lamin B receptor (LBR) can contribute to the association of the heterochromatin with the inner nuclear membrane (By similarity). |
| **Cellular Location** | Nucleus Note=Unassociated with chromosomes during mitosis |
| **Tissue Location** | Expressed in all adult and embryonic tissues. |

## References

1.Endocr Relat Cancer. 2010 May 18;17(2):455-67.2.Am J Pathol. 2011 Feb;178(2):672-8.

## Images

