

**CBX1 Monoclonal Antibody**

|                              |  |
|------------------------------|--|
| <b>Catalog No :</b>          | YM0097   |
| <b>Reactivity :</b>          | Human;Monkey   |
| <b>Applications :</b>        | WB;IF;FCM;ELISA  |
| <b>Target :</b>              | CBX1   |
| <b>Gene Name :</b>           | CBX1   |
| <b>Protein Name :</b>        | Chromobox protein homolog 1  |
| <b>Human Gene Id :</b>       | 10951  |
| <b>Human Swiss Prot No :</b> | P83916   |
| <b>Mouse Swiss Prot No :</b> | P83917   |
| <b>Immunogen :</b>           | Purified recombinant fragment of human CBX1 expressed in E. Coli.  |
| <b>Specificity :</b>         | CBX1 Monoclonal Antibody detects endogenous levels of CBX1 protein.  |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source :</b>              | Monoclonal, Mouse  |
| <b>Dilution :</b>            | WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications. |
| <b>Purification :</b>        | Affinity purification  |
| <b>Storage Stability :</b>   | -15°C to -25°C/1 year(Do not lower than -25°C)   |
| <b>Molecularweight :</b>     | 21kD   |
| <b>P References :</b>        | 1. Cell. 2003 Nov 26;115(5):523-35.<br>2. Cell. 2005 Sep 23;122(6):957-68.<br>3. Cell. 2006 Nov 3;127(3):635-48.           |

**Background :**

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. [provided by RefSeq, Jul 2008],

**Function :**

function:Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. Interaction with lamin B receptor (LBR) can contribute to the association of the heterochromatin with the inner nuclear membrane.,online information:Heterochromatin protein 1 entry,PTM:Not phosphorylated.,similarity:Contains 2 chromo domains.,subcellular location:Unassociated with chromosomes during mitosis.,subunit:Homodimer. Interacts directly with CHAF1A, EMSY, LBR, TIF1/TIF1A and TRIM28/TIF1B PXXVL motif via the chromoshadow domain. Interacts directly with histone H3 methylated at 'Lys-9' via the chromo domain. Interacts with SUV39H1 and SETDB1, SUV420H1 and SUV420H2. Interacts with PRDM6.,tissue specificity:In all adult and embryonic tissues.,

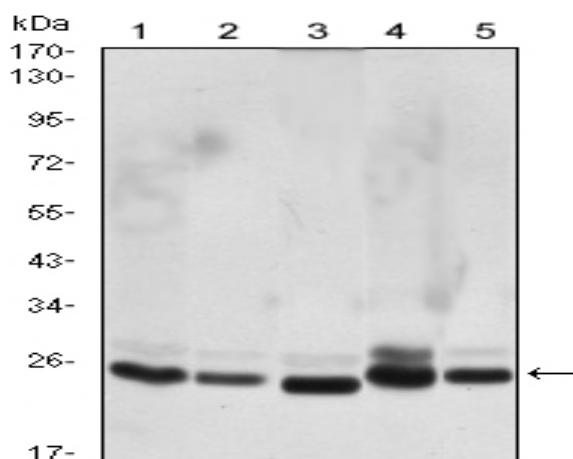
**Subcellular Location :**

Nucleus . Unassociated with chromosomes during mitosis.

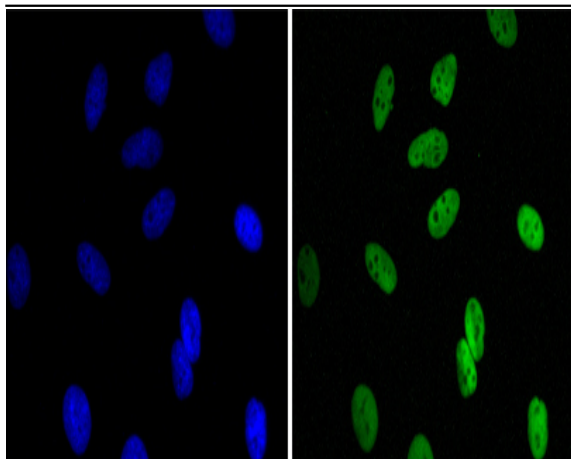
**Expression :**

Expressed in all adult and embryonic tissues.

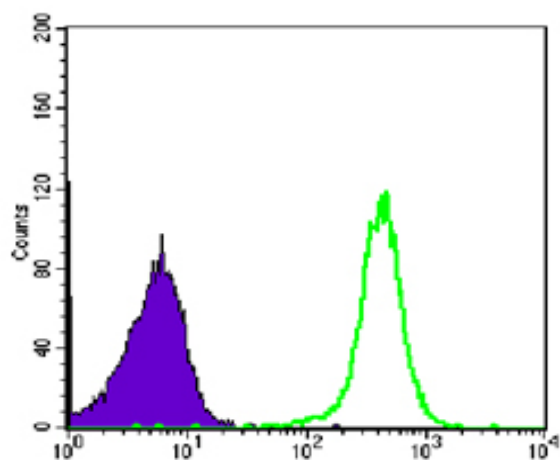
## Products Images



Western Blot analysis using CBX1 Monoclonal Antibody against HeLa (1), COS7 (2), NIH/3T3 (3), A431 (4),and C6 (5) cell lysate.



Immunofluorescence analysis of HeLa cells using CBX1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of COS7 cells using CBX1 Monoclonal Antibody (green) and negative control (purple).