

## CBX5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant CBX5.

Catalog # AT1411a

### Specification

#### CBX5 Antibody (monoclonal) (M01) - Product Information

Application	IF, WB, E
Primary Accession	<a href="#">P45973</a>
Other Accession	<a href="#">BC006821</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 kappa
Calculated MW	22225

#### CBX5 Antibody (monoclonal) (M01) - Additional Information

Gene ID 23468

#### Other Names

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

#### Target/Specificity

CBX5 (AAH06821, 1 a.a. ~ 191 a.a)  
full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### Dilution

WB~~1:500~1000

#### Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

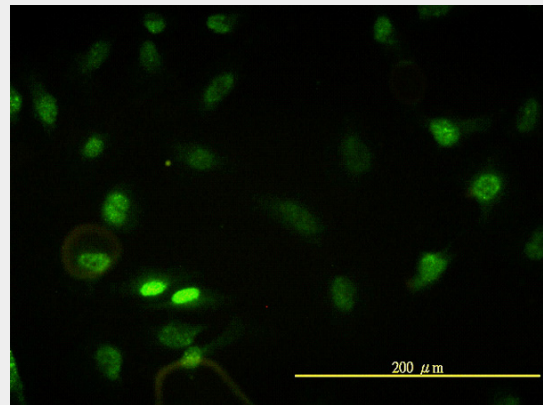
#### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

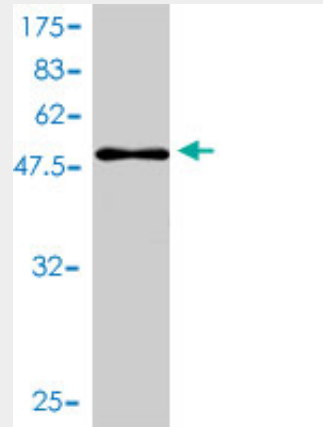
#### Precautions

CBX5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### CBX5 Antibody (monoclonal) (M01) - Protocols



Immunofluorescence of monoclonal antibody to CBX5 on HeLa cell. [antibody concentration 10 ug/ml]



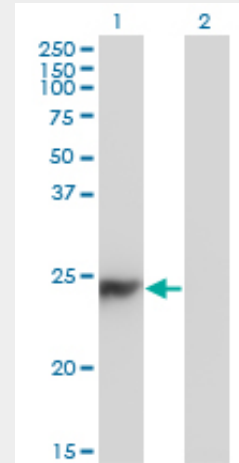
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (46.75 KDa) .

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](#)

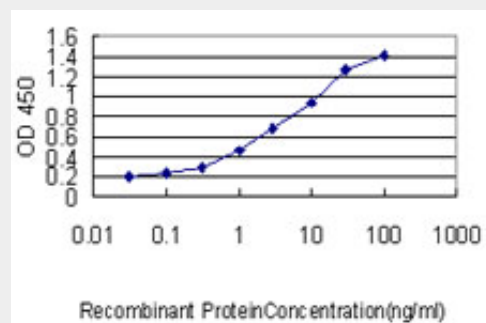


CBX5 monoclonal antibody (M01), clone 1E11-3A10 Western Blot analysis of CBX5 expression in HeLa S3 NE ( (Cat # AT1411a )



Western Blot analysis of CBX5 expression in transfected 293T cell line by CBX5 monoclonal antibody (M01), clone 1E11-3A10.

Lane 1: CBX5 transfected lysate(22.2 KDa).  
 Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged CBX5 is approximately 0.03ng/ml as a capture antibody.

### **CBX5 Antibody (monoclonal) (M01) - 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 chromoshadow-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.

### **CBX5 Antibody (monoclonal) (M01) - References**

Human POGZ modulates dissociation of HP1alpha from mitotic chromosome arms through Aurora B activation. Nozawa RS, et al. Nat Cell Biol, 2010 Jul. PMID 20562864. Lamin A rod domain mutants target heterochromatin protein 1alpha and beta for proteasomal degradation by activation of F-box protein, FBXW10. Chaturvedi P, et al. PLoS One, 2010 May 13. PMID 20498703. Inner centromere formation requires hMis14, a trident kinetochore protein that specifically recruits HP1 to human chromosomes. Kiyomitsu T, et al. J Cell Biol, 2010 Mar 22. PMID 20231385. Protein complex of Drosophila ATRX/XNP and HP1a is required for the formation of pericentric beta-heterochromatin in vivo. Emelyanov AV, et al. J Biol Chem, 2010 May 14. PMID 20154359. ATRX interacts with H3.3 in maintaining telomere structural integrity in pluripotent embryonic stem cells. Wong LH, et al. Genome Res, 2010 Mar. PMID 20110566.