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

CBX5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant CBX5.
Catalog # AT1411a

Product Information

Application	WB, IF, E
Primary Accession	P45973
Other Accession	BC006821
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1E11-3A10
Calculated MW	22225

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 IF~~1:50~200 E~~N/A
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.

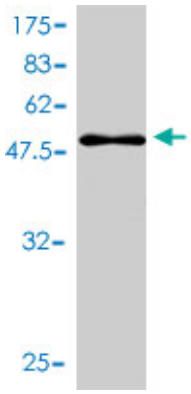
Background

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 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.

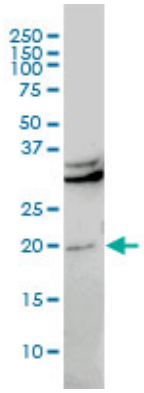
References

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.

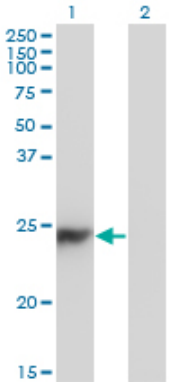
Images



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



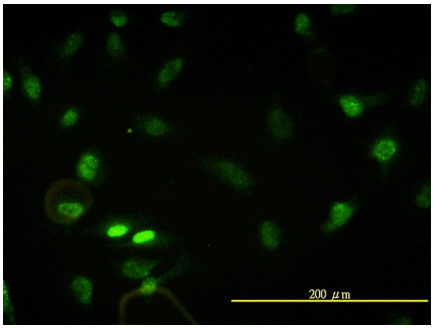
CBX5 monoclonal antibody (M01), clone 1E11-3A10
Western Blot analysis of CBX5 expression in Hela S3 NE (
(Cat # AT1411a)

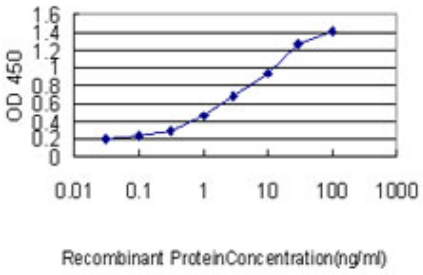


Western Blot analysis of CBX5 expression in transfected 293T cell line by CBX5 monoclonal antibody (M01), clone 1E11-3A10.

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

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





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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.