

CBX5 Antibody (monoclonal) (M01)

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

Specification

CBX5 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IF, E P45973 BC006821 Human mouse Monoclonal IgG1 kappa 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 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.

CBX5 Antibody (monoclonal) (M01) - Protocols

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

<u>Western Blot</u>



- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CBX5 Antibody (monoclonal) (M01) - Images



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).

250 -150 -50 -37 -25 -20 -15 -10 -



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.



Recombinant ProteinConcentration(ng/ml)

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 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.

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.