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CBX5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13779c

Specification

CBX5 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P45973
Other Accession	Q61686, NP_036249.1, NP_001120794.1, NP_001120793.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22225**
Antigen Region	**88-117**

CBX5 Antibody (Center) - Additional Information

Gene ID 23468

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

Target/Specificity
This CBX5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 88-117 amino acids from the Central region of human CBX5.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

CBX5 Antibody (Center) - Protein Information

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Name CBX5

Synonyms HP1A

Function Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph) (PubMed:19783980). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR) (PubMed:19783980). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1 (PubMed:19783980, PubMed:20231385). Required for the formation of the inner centromere (PubMed:20231385).

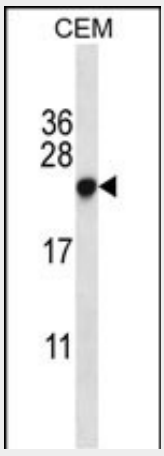
Cellular Location
Nucleus. Chromosome. Chromosome, centromere. Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

CBX5 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CBX5 Antibody (Center) - Images



CBX5 Antibody (Center) (Cat. #AP13779c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the CBX5 antibody detected the CBX5 protein (arrow).

CBX5 Antibody (Center) - 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 (Center) - References

Nozawa, R.S., et al. Nat. Cell Biol. 12(7):719-727(2010)
Zeng, W., et al. Epigenetics 5(4):287-292(2010)
Emelyanov, A.V., et al. J. Biol. Chem. 285(20):15027-15037(2010)
Kiyomitsu, T., et al. J. Cell Biol. 188(6):791-807(2010)
Chaturvedi, P., et al. PLoS ONE 5 (5), E10620 (2010) :