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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

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

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). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

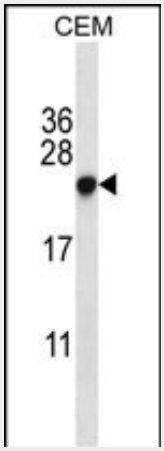
Cellular Location
Nucleus. Chromosome. Chromosome, centromere Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346) Component of centromeric and pericentromeric heterochromatin Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346)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