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CBX1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8915c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P83916
Other Accession	P83917
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23535
Calculated MW	21418
Antigen Region	128-155

Additional Information

Gene ID	10951
Other Names	Chromobox protein homolog 1, HP1Hsbeta, Heterochromatin protein 1 homolog beta, HP1 beta, Heterochromatin protein p25, M31, Modifier 1 protein, p25beta, CBX1, CBX
Target/Specificity	This CBX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 128-155 amino acids from the C-terminal region of human CBX1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	CBX1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CBX1

Synonyms	CBX
Function	Component of heterochromatin, which recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression (PubMed:41094145). Also recognizes and binds histone H1.4 methylated at 'Lys-26' (H1.4K26me) (PubMed:16127177). Excluded from chromatin when histone H1.4 is Simultaneously methylated at Lys-26 (H1.4K26me) and phosphorylated at Ser-27 (H1.4S27Ph) (PubMed:16127177). Interaction with lamin B receptor (LBR) can contribute to the association of the heterochromatin with the inner nuclear membrane (By similarity).
Cellular Location	Nucleus Note=Unassociated with chromosomes during mitosis
Tissue Location	Expressed in all adult and embryonic tissues.

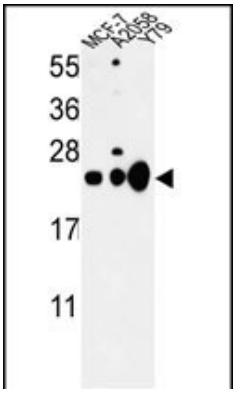
Background

CBX1 is 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 protein may play an important role in the epigenetic control of chromatin structure and gene expression.

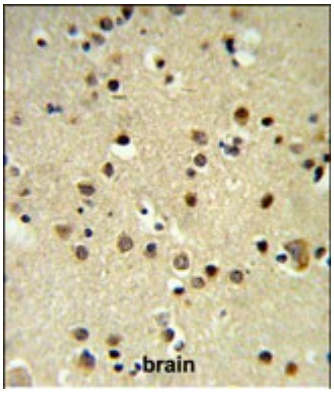
References

Aagaard,L., et.al., EMBO J. 18 (7), 1923-1938 (1999)

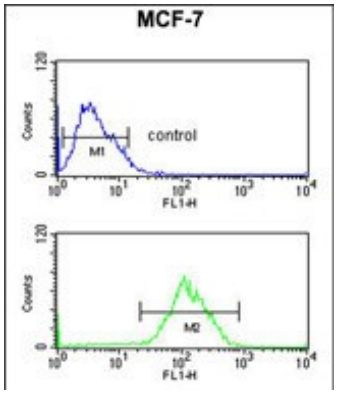
Images



Western blot analysis of CBX1 Antibody (C-term) (Cat. #AP8915c) in MCF-7, A2058, Y79 cell line lysates (35ug/lane). CBX1 (arrow) was detected using the purified Pab.



CBX1 Antibody (C-term) (Cat. #AP8915c) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CBX1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



CBX1 Antibody (C-term) (Cat. #AP8915c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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