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

CBX7 Rabbit pAb

Catalog # AP98578

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O95931
Other Accession	O95931
Predicted	Rat, Pig, Chimpanzee, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28341
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CBX7
Epitope Specificity	21-120/251
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 chromo domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Control of cell proliferation by Polycomb group proteins (PcG) is an important facet of cellular homeostasis and its disruption can promote tumorigenesis. CBX7 is a novel PcG protein which is found to control the growth of normal cells. CBX7 is a gene that encodes a Polycomb protein, as shown by sequence homology, its interaction with Ring1 and its localization to nuclear Polycomb bodies. CBX7 extends the lifespan of a wide range of normal human cells and immortalizes mouse fibroblasts by downregulating expression of the Ink4a/Arf locus. CBX7 does not inter-function or colocalize with Bmi1, and both can exert their actions independently of each other as shown by reverse genetics. CBX7 was highly expressed in three different prostate cancer cell lines and present at elevated levels in normal prostate. (Gil et al., 2004).

Additional Information

Gene ID	23492
Other Names	1600014J01Rik; D15Ertd417e; CBX7_HUMAN; CBX7; CBX7_MOUSE; CBX7_RAT; chromobox 7; chromobox homolog 7
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CBX7
Function	Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. Promotes histone H3 trimethylation at 'Lys-9' (H3K9me3). Binds to trimethylated lysine residues in histones, and possibly also other proteins. Regulator of cellular lifespan by maintaining the repression of CDKN2A, but not by inducing telomerase activity.
Cellular Location	Nucleus

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