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CBX4 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10003

Product Information

Application	WB, IHC
Primary Accession	O00257
Other Accession	O00257-2, NP_003646, NM_003655
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Bovine
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61368

Additional Information

Gene ID	8535
Alias Symbol	PC2, NBP16
Other Names	E3 SUMO-protein ligase CBX4, 632-, Chromobox protein homolog 4, Polycomb 2 homolog, Pc2, hPc2, CBX4
Target/Specificity	The polycomb group (PcG) protein HPC2, which functions as a transcriptional suppressor, is a candidate of KyoT2-binding proteins. Pc2 dramatically enhances CtBP sumoylation. Pc2 is a SUMO E3, and Polycomb Group bodies may be sumoylation centers.
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CBX4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	CBX4 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CBX4
Function	E3 SUMO-protein ligase that catalyzes sumoylation of target proteins by promoting the transfer of SUMO from the E2 enzyme to the substrate (PubMed:12679040, PubMed:22467880, PubMed:22825850). Also acts as a histone reader, which specifically recognizes and binds histone H3 trimethylated at 'Lys-9' and 'Lys-27' (H3K9me3 and H3K27me3, respectively)

via its chromo domain (By similarity). Catalyzes sumoylation of HNRNPK, a p53/TP53 transcriptional coactivator, hence indirectly regulates p53/TP53 transcriptional activation resulting in p21/CDKN1A expression (PubMed:22825850). Acts as a regulator of brown adipocyte differentiation by mediating sumoylation of PRDM16, thereby preventing PRDM16 ubiquitination and degradation (By similarity). Monosumoylates ZBTB35 (PubMed:22467880). 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 (PubMed:12167701, PubMed:19636380, PubMed:21282530). 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 (PubMed:12167701, PubMed:19636380, PubMed:21282530). Plays a role in the lineage differentiation of the germ layers in embryonic development (By similarity).

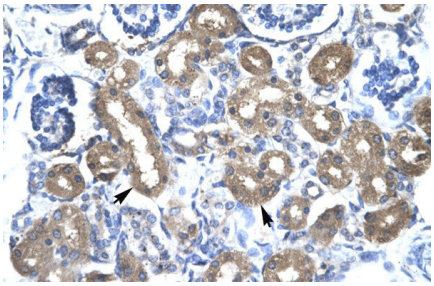
Cellular Location Cytoplasm. Nucleus. Nucleus speckle. Note=Localization to nuclear polycomb bodies is required for ZBTB35 sumoylation (PubMed:22467880) Localized in distinct foci on chromatin (PubMed:18927235)

Tissue Location Ubiquitous.

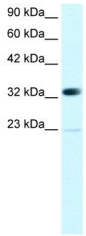
Background

This is a rabbit polyclonal antibody against CBX4. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. We usually provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

Images



CBX4 antibody - N-terminal region (AI10003) in Human kidney cells using Immunohistochemistry
Rabbit Anti-CBX 4 Antibody
Paraffin Embedded Tissue: Human Kidney
Cellular Data: Epithelial cells of renal tubule
Antibody Concentration: 4.0-8.0 µg/ml
Magnification: 400X



CBX4 antibody - N-terminal region (AI10003) in Human Jurkat cells using Western Blot
WB Suggested Anti-CBX4 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: Jurkat cell lysate
CBX4 is supported by BioGPS gene expression data to be expressed in Jurkat

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