

**CBX4 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2514B****Specification**

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**CBX4 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O00257</a>
Other Accession	<a href="#">O55187</a>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	410-437

**CBX4 Antibody (C-term) - Additional Information****Gene ID** 8535**Other Names**

E3 SUMO-protein ligase CBX4, 632-, Chromobox protein homolog 4, Polycomb 2 homolog, Pc2, hPc2, CBX4

**Target/Specificity**

This CBX4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 410-437 amino acids from the C-terminal region of human CBX4.

**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**

CBX4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CBX4 Antibody (C-term) - 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:[22825850](#)). Involved in the sumoylation of HNRNPK, a p53/TP53 transcriptional coactivator, hence indirectly regulates p53/TP53 transcriptional activation resulting in p21/CDKN1A expression. Monosumoylates ZNF131 (PubMed:[22825850](#)).

#### **Cellular Location**

Nucleus. Nucleus speckle. Note=Localization to nuclear polycomb bodies is required for ZNF131 sumoylation (PubMed:22467880). Localized in distinct foci on chromatin (PubMed:18927235)

#### **Tissue Location**

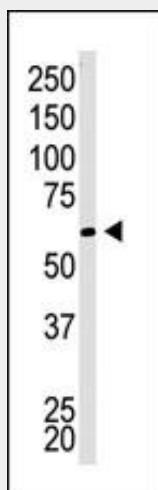
Ubiquitous.

### **CBX4 Antibody (C-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **CBX4 Antibody (C-term) - Images**



The anti-CBX4 C-term Pab (Cat. #AP2514b) is used in Western blot to detect CBX4 in Jurkat cell lysate.

### **CBX4 Antibody (C-term) - Background**

Chromobox homolog 4 (CBX4 or Pc2) is a member of Drosophila Polycomb group gene family. The polycomb group (PcG) genes are essential for maintenance of appropriate expression patterns of developmental master regulators and thus are essential for proper development. Changes in expression of PcG proteins have been associated with cancer. CBX4 is a part of the cellular memory system that is responsible for the inheritance of gene activity by progeny cells. CBX4 is involved in maintaining the transcriptionally repressive state of genes. It modifies chromatin, rendering it

heritably changed in its expressibility. Structurally, CBX4 contains 1 chromo domain. It was reported that Pc2 is involved in sumoylation process by recruiting SUMO E1 and E2, and Pc2 is actually SUMO E3 during sumoylation events. CBX4 expression is ubiquitous.

#### **CBX4 Antibody (C-term) - References**

Kagey, M.H., et al., Cell 113(1):127-137 (2003).

Satijn, D.P., et al., Mol. Cell. Biol. 17(10):6076-6086 (1997).

#### **CBX4 Antibody (C-term) - Citations**

- [HiPLA: High-throughput imaging proximity ligation assay.](#)
- [Different polycomb group CBX family proteins associate with distinct regions of chromatin using nonhomologous protein sequences.](#)
- [Regulation of the SUMO pathway sensitizes differentiating human endometrial stromal cells to progesterone.](#)