

CBX4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2514b**Specification**

CBX4 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O00257](#)**CBX4 Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP2514b](/product/products/AP2514b) was selected from the C-term region of human CBX4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CBX4 Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/12679040), PubMed: [22825850](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CBX4 Antibody (C-term) Blocking Peptide - Images**CBX4 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).