

PC2 (CBX4) Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP2514a**Specification**

PC2 (CBX4) Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [O00257](#)**PC2 (CBX4) Antibody (N-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 [AP2514a](/product/products/AP2514a) was selected from the N-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.

PC2 (CBX4) Antibody (N-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.

PC2 (CBX4) Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

PC2 (CBX4) Antibody (N-term) Blocking peptide - Images**PC2 (CBX4) Antibody (N-term) Blocking peptide - Background**

CBX4 is a member of Drosophila Polycomb group gene family. The polycomb group (PcG) genes are essential for maintenance of proper expression patterns of developmental master regulators; changes in expression of PcG proteins have been associated with cancer. CBX4 is a part of the cellular memory system responsible for the inheritance of gene activity by progeny cells. It participates in maintaining the transcriptionally repressive state of genes. CBX4 is part of a complex that acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. CBX4 is an E3 SUMO-protein ligase which facilitates SUMO1 conjugation by UBE2L.

PC2 (CBX4) Antibody (N-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).