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

Specification

PC2 (CBX4) Antibody (N-term) Blocking peptide - Product Information

Primary 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 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, 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.

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 pf 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 acomplex 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 UBE2I.

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).