

**CBL Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP4781b****Specification**

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**CBL Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P22681](#)**CBL Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 867

**Other Names**

E3 ubiquitin-protein ligase CBL, 632-, Casitas B-lineage lymphoma proto-oncogene, Proto-oncogene c-Cbl, RING finger protein 55, Signal transduction protein CBL, CBL, CBL2, RNF55

**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.

**CBL Antibody (C-term) Blocking Peptide - Protein Information**

Name CBL

Synonyms CBL2, RNF55

**Function**

Adapter protein that functions as a negative regulator of many signaling pathways that are triggered by activation of cell surface receptors. Acts as an E3 ubiquitin-protein ligase, which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/17094949" target="\_blank">17094949</a>). Ubiquitinates SPRY2 (PubMed:<a href="http://www.uniprot.org/citations/17094949" target="\_blank">17094949</a>, PubMed:<a href="http://www.uniprot.org/citations/17974561" target="\_blank">17974561</a>). Ubiquitinates EGFR (PubMed:<a href="http://www.uniprot.org/citations/17974561" target="\_blank">17974561</a>). Recognizes activated receptor tyrosine kinases, including KIT, FLT1, FGFR1, FGFR2, PDGFRA, PDGFRB, CSF1R, EPHA8 and KDR and terminates signaling. Recognizes membrane-bound HCK, SRC and other kinases of the SRC family and mediates their ubiquitination and degradation. Participates in signal transduction in hematopoietic cells. Plays an important role in the regulation of osteoblast differentiation and apoptosis. Essential for osteoclastic bone resorption. The 'Tyr-731' phosphorylated form induces the activation and recruitment of phosphatidylinositol 3-kinase to the

cell membrane in a signaling pathway that is critical for osteoclast function. May be functionally coupled with the E2 ubiquitin- protein ligase UB2D3. In association with CBLB, required for proper feedback inhibition of ciliary platelet-derived growth factor receptor- alpha (PDGFRA) signaling pathway via ubiquitination and internalization of PDGFRA (By similarity).

**Cellular Location**

Cytoplasm. Cell membrane. Cell projection, cilium. Golgi apparatus. Note=Colocalizes with FGFR2 in lipid rafts at the cell membrane

**CBL Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**CBL Antibody (C-term) Blocking Peptide - Images****CBL Antibody (C-term) Blocking Peptide - Background**

The CBL oncogene was first identified as part of a transforming retrovirus which induces mouse pre-B and pro-B cell lymphomas. As an adaptor protein for receptor protein-tyrosine kinases, it positively regulates receptor protein-tyrosine kinase ubiquitination in a manner dependent upon its variant SH2 and RING finger domains. Ubiquitination of receptor protein-tyrosine kinases terminates signaling by marking active receptors for degradation.

**CBL Antibody (C-term) Blocking Peptide - References**

Chandra, V., et al. J. Virol. 84(8):3857-3867(2010) Song, J.J., et al. Cell. Signal. 22(3):553-563(2010) Kim, H.S., et al. Immunity 32(2):175-186(2010) Truitt, L., et al. Cancer Res. 70(3):1141-1153(2010)