10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Cbl Antibody
Catalog # ASC10472

Specification

Cbl Antibody - Product Information

Application	**WB, IF**
Primary Accession	P22681
Other Accession	P22681, 115855
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**Cbl antibody can be used for detection of cbl by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunoflourescence starting at 20 µg/mL.**

Cbl Antibody - Additional Information

Gene ID **867**

Other Names
Cbl Antibody: CBL2, NSLL, C-CBL, RNF55, FRA11B, CBL2, E3 ubiquitin-protein ligase CBL, Casitas B-lineage lymphoma proto-oncogene, Cas-Br-M (murine) ecotropic retroviral transforming sequence

Target/Specificity
CBL;

Reconstitution & Storage
Cbl antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
Cbl Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Cbl Antibody - 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:17094949). Ubiquitinates

SPRY2 (PubMed:17094949, PubMed:17974561). Ubiquitinates EGFR (PubMed:17974561). 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).

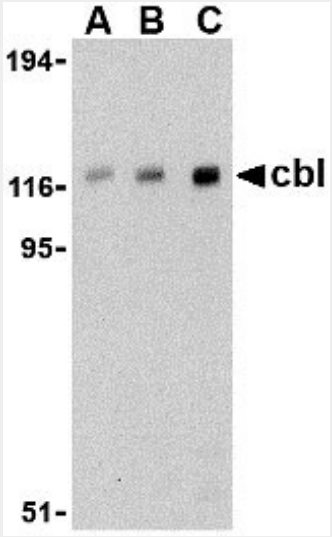
Cellular Location
Cytoplasm. Cell membrane. Cell projection, cilium. Golgi apparatus. Note=Colocalizes with FGFR2 in lipid rafts at the cell membrane

Cbl Antibody - Protocols

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

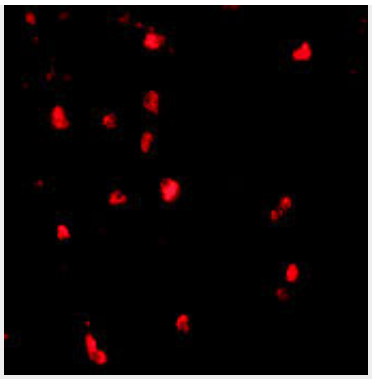
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Cbl Antibody - Images



Western blot analysis of cbl in Daudi cell lysate with cbl antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Immunofluorescence of cbl in human lymph node tissue with cbl antibody at 20 µg/mL.

Cbl Antibody - Background

Cbl Antibody: The mammalian cbl family of ubiquitin ligases consists of three homologs known as cbl (also known as c-Cbl), Cbl-B, and Cbl-3 which share highly conserved a tyrosine-kinase-binding domain, linker and RING finger domain in their amino-terminal halves. Similar to other E3 ubiquitin ligases, Cbl catalyzes the transfer of ubiquitin from an E2 or Ubc (ubiquitin-conjugating) enzyme to the e-amino group of a lysine residue of the substrate protein. Cbl acts to negatively regulate many types of cell-surface receptors, including the Syk protein tyrosine kinase family. Cbl is thought to be involved in T- and B-cell signaling, in addition to thymus development. Of the three known homologs in the cbl family, cbl antibody reacts specifically with cbl. Multiple isoforms of cbl have been reported.

Cbl Antibody - References

Thien CBF and Langdon WY. C-Cbl and Cbl-b ubiquitin ligases: substrate diversity and the negative regulation of signaling responses. Biochem. J. 2005; 391:153-66
Weissman AM. Themes and variations on ubiquitylation. Nat. Rev. Mol. Cell Biol. 2001; 2:169-78.
Swaminathan G and Tsygankov AY. The Cbl family of proteins: ring leaders in regulation of cell signaling. J. Cell. Physiol. 2006; 209:21-43.