

c-CBL Antibody (clone 3B12)
Mouse Monoclonal Antibody
Catalog # ALS17066**Specification**

c-CBL Antibody (clone 3B12) - Product Information

Application	IHC, IF, WB
Primary Accession	P22681
Other Accession	867
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	99633

c-CBL Antibody (clone 3B12) - Additional Information**Gene ID** 867**Other Names**

CBL, C-CBL, Oncogene CBL2, RING finger protein 55, Proto-oncogene c-Cbl, RNF55, CBL2, FRA11B, NSLL

Target/Specificity

Human CBL

Reconstitution & Storage

Ascites, 0.03% sodium azide. Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

c-CBL Antibody (clone 3B12) is for research use only and not for use in diagnostic or therapeutic procedures.

c-CBL Antibody (clone 3B12) - 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](http://www.uniprot.org/citations/17094949)). Ubiquitinates SPRY2 (PubMed: [17094949](http://www.uniprot.org/citations/17094949), PubMed: [17974561](http://www.uniprot.org/citations/17974561)). Ubiquitinates EGFR (PubMed: [17974561](http://www.uniprot.org/citations/17974561)).

<http://www.uniprot.org/citations/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

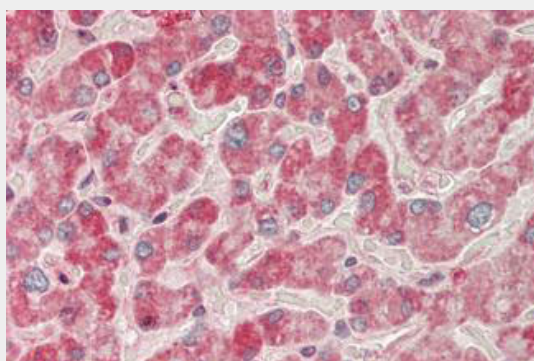
Volume

250 µl

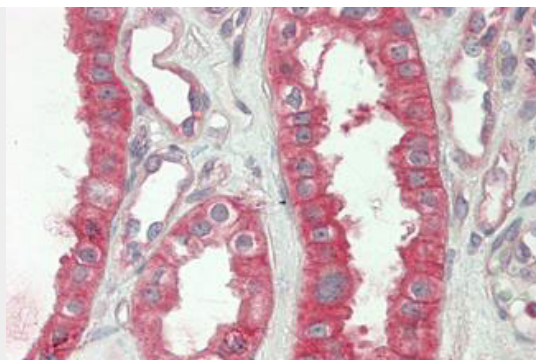
c-CBL Antibody (clone 3B12) - Protocols

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

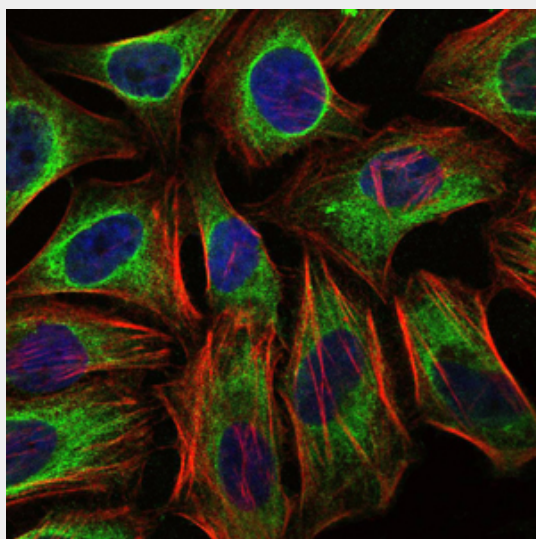
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

c-CBL Antibody (clone 3B12) - Images

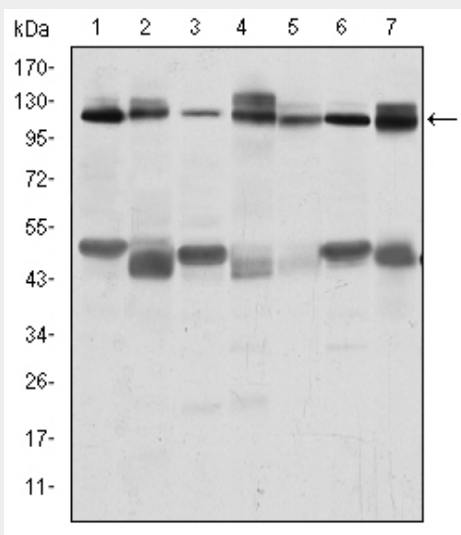
Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)



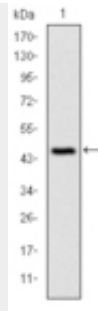
Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence of HeLa cells using C-CBL mouse monoclonal antibody (green).



Western blot using C-CBL mouse monoclonal antibody against RAJI (1), RAW264.7 (2), K562 (3),...



Western blot using C-CBL monoclonal antibody against human C-CBL (AA: 684-865) recombinant protein.

c-CBL Antibody (clone 3B12) - Background

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. Recognizes activated receptor tyrosine kinases, including KIT, FLT1, FGFR1, FGFR2, PDGFRA, PDGFRB, EGFR, 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.

c-CBL Antibody (clone 3B12) - References

- Blake T.J., et al. *Oncogene* 6:653-657(1991).
- Taylor T.D., et al. *Nature* 440:497-500(2006).
- Howlett C.J., et al. *Biochem. Biophys. Res. Commun.* 257:129-138(1999).
- Joazeiro C.A., et al. *Science* 286:309-312(1999).
- Donovan J.A., et al. *J. Biol. Chem.* 269:22921-22924(1994).