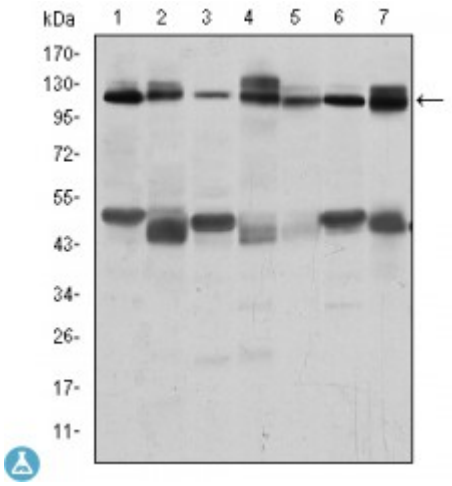
Anti-Cbl antibody



Description	Mouse monoclonal to Cbl.

Model	STJ97898
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	ELISA, FC, IF, IHC, WB
Immunogen	Purified recombinant fragment of human Cbl expressed in E. Coli.
Gene ID	867
Gene Symbol	CBL
Dilution range	WB 1:500-1:2000IHC 1:200-1:1000IF 1:200-1:1000FC 1:200-1:400ELISA 1:10000
Specificity	Cbl Monoclonal Antibody detects endogenous levels of Cbl protein.
Purification	Affinity purification
Clone ID	3B12
Note	For Research Use Only (RUO).
Protein Name	E3 ubiquitin-protein ligase CBL Casitas B-lineage lymphoma proto-oncogene Proto-oncogene c-Cbl RING finger protein 55 RING-type E3 ubiquitin transferase CBL Signal transduction protein CBL
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1

Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1541OMIM:165360
Alternative Names	E3 ubiquitin-protein ligase CBL Casitas B-lineage lymphoma proto-oncogene Proto-oncogene c-Cbl RING finger protein 55 RING-type E3 ubiquitin transferase CBL Signal transduction protein CBL
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. 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.
Sequence and Domain Family	The RING-type zinc finger domain mediates binding to an E2 ubiquitin-conjugating enzyme.; The N-terminus is composed of the phosphotyrosine binding (PTB) domain, a short linker region and the RING-type zinc finger. The PTB domain, which is also called TKB (tyrosine kinase binding) domain, is composed of three different subdomains: a four-helix bundle (4H), a calcium-binding EF hand and a divergent SH2 domain.
Cellular Localization	Cytoplasm. Cell membrane. Colocalizes with FGFR2 in lipid rafts at the cell membrane.
Post-translational Modifications	Phosphorylated on tyrosine residues by ALK, EGFR, SYK, FYN and ZAP70 . Phosphorylated on tyrosine residues in response to FLT1 and KIT signaling. Phosphorylated on tyrosine residues by INSR and FGR. Phosphorylated on several tyrosine residues by constitutively activated FGFR3. Not phosphorylated at Tyr-731 by FGFR3. Phosphorylated on tyrosine residues by activated CSF1R, PDGFRA and PDGFRB. Phosphorylated on tyrosine residues by HCK. Ubiquitinated, leading to its degradation via the proteasome.