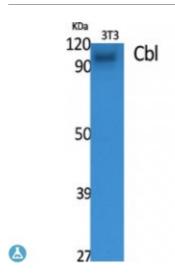


Anti-Cbl antibody



Description Rabbit polyclonal to Cbl.

Model STJ92055

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human Cbl around the non-phosphorylation

site of Y774.

Immunogen Region 710-790 aa

Gene ID <u>867</u>

Gene Symbol CBL

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity Cbl Polyclonal Antibody detects endogenous levels of Cbl protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

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

Molecular Weight 55120 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1541OMIM:165360</u>

Alternative Names E3 ubiquitin-protein ligase CBL Casitas B-lineage lymphoma proto-oncogene

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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 Phosphorylated on tyrosine residues by ALK, EGFR, SYK, FYN and ZAP70. **Modifications** Phosphorylated on tyrosine residues in response to FLT1 and KIT signaling.

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.