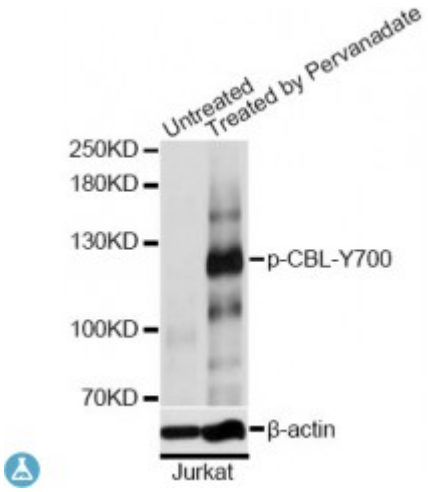
Anti-Phospho-CBL-(Y700) Antibody



Description	This gene is a proto-oncogene that encodes a RING finger E3 ubiquitin ligase. The encoded protein is one of the enzymes required for targeting substrates for degradation by the proteasome. This protein mediates the transfer of ubiquitin from ubiquitin conjugating enzymes (E2) to specific substrates. This protein also contains an N-terminal phosphotyrosine binding domain that allows it to interact with numerous tyrosine-phosphorylated substrates and target them for proteasome degradation. As such it functions as a negative regulator of many signal transduction pathways. This gene has been found to be mutated or translocated in many cancers including acute myeloid leukaemia, and expansion of CGG repeats in the 5' UTR has been associated with Jacobsen syndrome. Mutations in this gene are also the cause of Noonan syndrome-like disorder.

Model	STJ116400
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	A synthetic phosphorylated peptide around Y700 of human CBL (NP_005179.2).
Gene ID	867
Gene Symbol	CBL
Dilution range	WB 1:500 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	E3 ubiquitin-protein ligase CBL
Molecular Weight	99.633 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:1541OMIM:165360Reactome:R-HSA-1059683
Alternative Names	E3 ubiquitin-protein ligase 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,
Cellular Localization	Cytoplasm, 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,