

Summary

Production Name	Cbl (phospho Tyr700) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC,WB
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CBL
Alternative Names	CBL; CBL2; RNF55; E3 ubiquitin-protein ligase CBL; Casitas B-lineage lymphoma proto-
	oncogene; Proto-oncogene c-Cbl; RING finger protein 55; Signal transduction protein
	CBL
Gene ID	867.0
SwissProt ID	P22681.The antiserum was produced against synthesized peptide derived from human
	CBL around the phosphorylation site of Tyr700. AA range:666-715

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. IHC 1:100 - 1:300.
Molecular Weight	120kD



Background

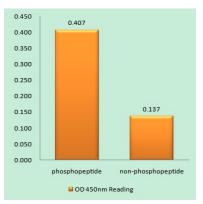
Cbl proto-oncogene(CBL) Homo sapiens This gene is a proto-oncogene that encodes a RING finger E3 ubiquitin ligase. The encoded protein is one of the enzymes required for targeting substrates for degradation by the proteasome. This protein mediates the transfer of ubiquitin from ubiquitin conjugating 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. [provided by RefSeq, Jul 2016], disease: Can be converted to an oncogenic protein by deletions or mutations that disturb its ability to down-regulate RTKs., domain: 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.,domain:The RING-type zinc finger domain mediates binding to an E2 ubiquitin-conjugating enzyme, function: Participates in signal transduction in hematopoietic cells. Adapter protein that functions as a negative regulator of many signaling pathways that start from receptors at the cell surface. 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 PDGFA, EGF and CSF1, and terminates signaling.,miscellaneous:This protein has one functional calcium-binding site.,pathway:Protein modification; protein ubiquitination.,PTM:Phosphorylated on tyrosine residues by EGFR, SYK, FYN and ZAP70 (By similarity). Phosphorylated on tyrosine residues by INSR., similarity: Contains 1 CBL N-terminal domain.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 1 SH2 domain.,similarity:Contains 1 UBA domain.,similarity:Contains 2 EF-hand-like domains.,subunit:Associates with NCK via its SH3 domain. The phosphorylated C-terminus interacts with CD2AP via its second SH3 domain. Binds to UBE2L3. Interacts with adapters SLA, SLA2 and with the phosphorylated C-terminus of SH2B2. Interacts with EGFR, SYK and ZAP70 via the highly conserved CbI-N region. Also interacts with SORBS1 and INPPL1/SHIP2. Interacts with phosphorylated LAT2. May interact with CBLB.,

Research Area

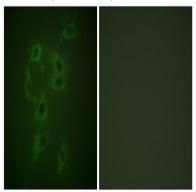
ErbB HER; Ubiquitin mediated proteolysis; Endocytosis; Jak STAT; T Cell Receptor; Insulin Receptor; Pathways in cancer; Chronic myeloid leukemia:

Image Data

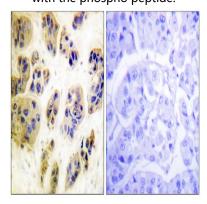




Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CBL (Phospho-Tyr700) Antibody

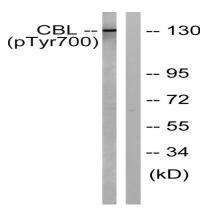


Immunofluorescence analysis of HepG2 cells, using CBL (Phospho-Tyr700) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using CBL (Phospho-Tyr700) Antibody. The picture on the right is blocked with the phospho peptide.





Western blot analysis of lysates from K562 cells treated with Na3VO4 0.3nM, using CBL (Phospho-Tyr700) Antibody. The lane on the right is blocked with the phospho peptide.

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