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Phospho-CBL (S669) Antibody

Rabbit mAb Catalog # AP92850

Product Information

Application WB Primary Accession P22681

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names Casitas B lineage lymphoma proto oncogene; cbl; CBL2; E3 ubiquitin protein

ligase CBL; Oncogene CBL2; Proto oncogene c CBL; RING finger protein 55;

RNF55; Signal transduction protein CBL;

IsotypeRabbit IgGHostRabbitCalculated MW99633

Additional Information

Dilution WB 1:500~1:2000 **Purification** Affinity-chromatography

Immunogen A synthesized peptide derived from human Phospho-CBL (S669)

Description 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.

Storage Condition and Buffer

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name CBL

Synonyms CBL2, RNF55

Function E3 ubiquitin-protein ligase that acts as a negative regulator of many

signaling pathways by mediating ubiquitination of cell surface receptors

(PubMed: 10514377, PubMed: 11896602, PubMed: 14661060, PubMed: 14739300, PubMed: 15190072, PubMed: 17509076, PubMed: 18374639, PubMed: 19689429, PubMed: 21596750,

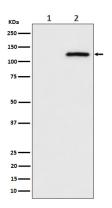
PubMed:<u>28381567</u>). Accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome (PubMed:<u>10514377</u>, PubMed:<u>14661060</u>, PubMed:<u>14739300</u>, PubMed:<u>17094949</u>, PubMed:<u>17509076</u>, PubMed:<u>17974561</u>). Recognizes activated receptor tyrosine kinases, including KIT, FLT1, FGFR1, FGFR2,

PDGFRA, PDGFRB, CSF1R, EPHA8 and KDR and mediates their ubiquitination to terminate signaling (PubMed:15190072, PubMed:18374639, PubMed:21596750). Recognizes membrane-bound HCK, SRC and other kinases of the SRC family and mediates their ubiquitination and degradation (PubMed: 11896602). Ubiquitinates EGFR and SPRY2 (PubMed: 17094949, PubMed:17974561). Ubiquitinates NECTIN1 following association between NECTIN1 and herpes simplex virus 1/HHV-1 envelope glycoprotein D, leading to NECTIN1 removal from cell surface (PubMed: 28381567). Participates in signal transduction in hematopoietic cells. Plays an important role in the regulation of osteoblast differentiation and apoptosis (PubMed:15190072. PubMed: 18374639). Essential for osteoclastic bone resorption (PubMed: 14739300). 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 (PubMed: 14739300). 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

Images



Western blot analysis of Phospho-CBL (S669) expression in (1) HeLa cell lysate; (2) HeLa cell treated with pervanadate lysate.

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