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Phospho-CBL (Tyr774) Rabbit mAb

Catalog # AP74970

Product Information

ApplicationWB, IPPrimary AccessionP22681ReactivityHuman, RatHostRabbit

Clonality Monoclonal Antibody

Calculated MW 99633

Additional Information

Gene ID 867

Other Names CBL

Dilution WB~~1/500-1/1000 IP~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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: <u>10514377</u>, PubMed: <u>11896602</u>, PubMed: <u>14661060</u>, PubMed: <u>14739300</u>, PubMed: <u>15190072</u>, PubMed: <u>17509076</u>, PubMed: <u>18374639</u>, PubMed: <u>19689429</u>, PubMed: <u>21596750</u>,

PubMed: 28381567). Accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome (PubMed: 10514377, PubMed: 14661060, PubMed: 14739300, PubMed: 17094949, PubMed: 17509076, PubMed: 17974561). 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,

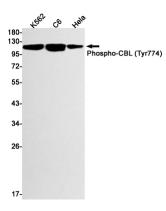
PubMed:<u>21596750</u>). Recognizes membrane-bound HCK, SRC and other kinases of the SRC family and mediates their ubiquitination and degradation (PubMed:<u>11896602</u>). Ubiquitinates EGFR and SPRY2 (PubMed:<u>17094949</u>, PubMed:<u>17974561</u>). Ubiquitinates NECTIN1 following association between

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



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