Anti-CBLB antibody

Description	Unconjugated Rabbit polyclonal to CBLB

Model	STJ190779
Host	Rabbit
Reactivity	Human
Applications	ELISA, WB
Gene ID	868
Gene Symbol	CBLB
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	CBLB Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in placenta, heart, lung, kidney, spleen, ovary and testis, as well as fetal brain and liver and hematopoietic cell lines, but not in adult brain, liver, pancreas, salivary gland, or skeletal muscle. Present in lymphocytes (at protein level).
Purification	CBLB 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-B Casitas B-lineage lymphoma proto-oncogene b RING finger protein 56 RING-type E3 ubiquitin transferase CBL-B SH3-binding protein CBL-B Signal transduction protein CBL-B
Molecular Weight	108 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1542OMIM:604491
Alternative Names	E3 ubiquitin-protein ligase CBL-B Casitas B-lineage lymphoma proto-oncogene b RING finger protein 56 RING-type E3 ubiquitin transferase CBL-B SH3-binding protein CBL-B Signal transduction protein CBL-B
Function	E3 ubiquitin-protein ligase which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and transfers it to substrates, generally promoting their degradation by the proteasome. Negatively regulates TCR (T-cell receptor), BCR (B-cell receptor) and FCER1 (high affinity immunoglobulin epsilon receptor) signal transduction pathways. In naive T-cells, inhibits VAV1 activation upon TCR engagement and imposes a requirement for CD28 costimulation for proliferation and IL-2 production. Also acts by promoting PIK3R1/p85 ubiquitination, which impairs its recruitment to the TCR and subsequent activation. In activated T-cells, inhibits PLCG1 activation and calcium mobilization upon restimulation and promotes anergy. In B-cells, acts by ubiquitinating SYK and promoting its proteasomal degradation. Slightly promotes SRC ubiquitination. May be involved in EGFR ubiquitination and internalization. May be functionally coupled with the E2 ubiquitin-protein ligase UB2D3.
Sequence and Domain Family	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.; The RING-type zinc finger domain mediates binding to an E2 ubiquitin-conjugating enzyme.; The UBA domain interacts with poly-ubiquitinated proteins.
Cellular Localization	Cytoplasm. Upon EGF stimulation, associates with endocytic vesicles.
Post-translational Modifications	Phosphorylated on tyrosine and serine residues upon TCR or BCR activation, and upon various types of cell stimulation. Auto-ubiquitinated upon EGF-mediated cell activation or upon T-cell costimulation by CD28; which promotes proteasomal degradation.