

Rabbit CBLB Polyclonal Antibody | anti-CBLB antibody

CBLB Antibody

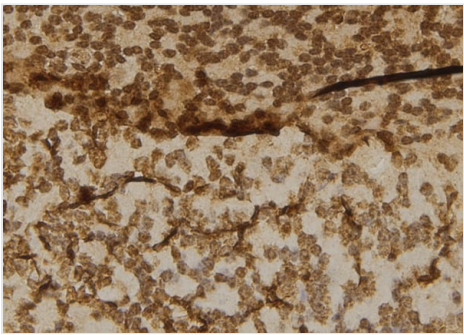
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326517	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

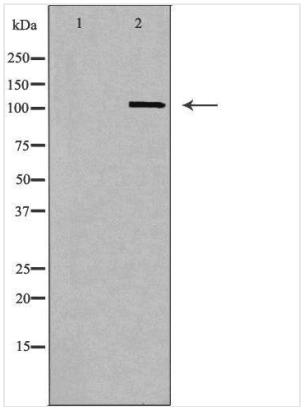
CBLB; Polyclonal Antibody; CBLB Antibody; AI429560; AI851073; Cas Br M (murine) ecotropic retroviral transforming sequence b; Casitas B lineage lymphoma b; Casitas B lineage lymphoma proto oncogene b; Casitas B-lineage lymphoma proto-oncogene b; Cbl b; CBLB_HUMAN; DKFZp686J10223; DKFZp779A0729; DKFZp779F1443; E3 ubiquitin protein ligase CBL B; E3 ubiquitin-protein ligase CBL-B; EC 6.3.2.-; FLJ36865; FLJ41152; Nbla00127; RING finger protein 56; RNF56; SH3 binding protein CBL B; SH3-binding protein CBL-B; Signal transduction protein CBL B; Signal transduction protein CBL-B; anti-CBLB antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CBLB antibody detects endogenous levels of total CBLB
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	982
Applicable Applications for anti-CBLB antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CBLB
Subcellular Location	Cytoplasmic and Nuclear
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).
Predicted Cross Reactivity	Pig, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (86%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326517 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts of brain tissue, using CBLB antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CBLB antibody	Description: The Casitas B lineage lymphoma (Cbl) proteins (in mammals these are c-Cbl, Cbl-b, and Cbl-c) are a family of single subunit RING finger protein-ubiquitin E3 ligases that contain multiple protein interaction motifs (1). All Cbl proteins have a highly conserved N-terminal tyrosine kinase-binding (TKB) domain that mediates interactions between Cbl proteins and phosphorylated tyrosine residues on Cbl substrates. C-terminal to the RING finger, Cbl proteins have proline-rich domains that mediate interactions with SH3 domain-containing proteins. Phosphorylated tyrosine residues mediate interactions with SH2 domain-containing proteins such as the p85 subunit of PI3K. These protein-protein interaction motifs allow Cbl family proteins to function as adaptor proteins (2). This adaptor function contributes to the E3-dependent activities of Cbl proteins by targeting specific substrates for ubiquitination and degradation. The adaptor function also contributes to non-E3-dependent activities, such as the recruitment of proteins involved in receptor tyrosine kinase internalization, localization of Cbl proteins to specific subcellular compartments, and activation of discrete signaling pathways (1). Cbl-b is an E3 ubiquitin ligase with a domain organization nearly identical to that of c-Cbl. The role of Cbl-b in hematopoietic cell physiology is well documented. Cbl-b expression is important for the downregulation of TCR expression during antigen recognition (2). Cbl-b also acts as a potent negative regulator of the CD28 signaling cascade to Vav and Rac1 through its ability to ubiquitinate the p85 regulatory subunit of PI3K (3, 4). As a critical regulator of clonal anergy in T lymphocytes, Cbl-b mRNA and protein are upregulated in T cells following calcium mobilization and calcineurin activation (5). Cbl-b-deficient T cells are resistant to anergy induction (5). The molecular events governing this phenotype are thought to be linked to defects in the ubiquitination of PLCgamma1 and PKCtheta since the degradation of these signaling molecules, which occurs following restimulation of wild-type anergic T cells, fails to occur in Cbl-b-deficient T cells (5). 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. Subunit Structure: Interacts with SH3 domain-containing proteins LCK, CRK and SORBS1. Interacts with LCP2 and ZAP70. May interact with CBL. Interacts with SH3 domain-containing proteins VAV1, FYN, FGR, PLCG1, GRB2, CRKL, PIK3R1 and SH3KBP1/CIN85. Identified in heterotrimeric complexes with SH3KBP1/CIN85, CD2AP and ARHGEF7, where one CBLB peptide binds two copies of the other protein. Interacts with poly-ubiquitinated proteins. Dimerization is required for the binding of poly-ubiquitin, but not for the binding of mono-ubiquitin. Interacts with EGFR (phosphorylated). 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. Similarity: 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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	1012443564
NCBI GeneID	868
NCBI Accession #	NP_001308717.1
NCBI GenBank Nucleotide #	NM_001321788.1
UniProt Accession #	Q13191; Q13192; Q13193; Q3LIC0; Q63Z43; Q8IVC5; A8K9S7; B7WNM4
Molecular Weight	Observed: 109 kDa Predicted: 110 kDa
NCBI Official Full Name	E3 ubiquitin-protein ligase CBL-B isoform b
NCBI Official Synonym Full Names	Cbl proto-oncogene B
NCBI Official Symbol	CBLB

NCBI Official Synonym Symbols	Cbl-b; RNF56; Nbla00127
NCBI Protein Information	E3 ubiquitin-protein ligase CBL-B
UniProt Protein Name	E3 ubiquitin-protein ligase CBL-B
UniProt Gene Name	CBLB
UniProt Synonym Gene Names	RNF56

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/cblb-antibody-immunohistochemistry-western-blot-elisa/326517>