



Rabbit Anti-RNF56 antibody

SL5949R

Product Name:	RNF56
Chinese Name:	Ring finger protein56抗体
Alias:	CBLB; Cas Br M (murine) ecotropic retroviral transforming sequence b; Casitas B lineage lymphoma b; Casitas B lineage lymphoma proto oncogene b; Cbl b; E3 ubiquitin protein ligase CBL B; RING finger protein 56; RNF56; SH3 binding protein CBL B; Signal transduction protein CBL B.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	108kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RNF56/CBLB:101-200/982
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	CBLB (Cas Br M (murine) ecotropic retroviral transforming sequence b) has high homology to CBL, the proto-oncogene that induces pre-B cell lymphomas and myeloid leukemias in mice. Like CBL, CBLB contains putative nuclear localization signal, zinc finger, leucine zipper, and proline-rich domains. CBLB associates with FYN, FGR, and

PLCG1. Acts as an 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. May also be involved in EGFR ubiquitination and internalization. In addition to its role in the prevention of chronic inflammation and autoimmunity, CBLB also has a function in acute lung inflammation. There are 4 isoforms produced by alternative splicing.

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. May also be involved in EGFR ubiquitination and internalization. [PATHWAY] Protein modification; protein ubiquitination.

Subunit:

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.

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).

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:

Contains 1 Cbl-PTB (Cbl-type phosphotyrosine-binding) domain.
Contains 1 RING-type zinc finger.
Contains 1 UBA domain.

SWISS:

Q13191

Gene ID:

868

Database links:

[Entrez Gene: 868](#)Human

[Entrez Gene: 208650](#)Mouse

[Entrez Gene: 171136](#)Rat

[Omim: 604491](#)Human

[SwissProt: Q13191](#)Human

[SwissProt: Q3TTA7](#)Mouse

[SwissProt: Q8K4S7](#)Rat

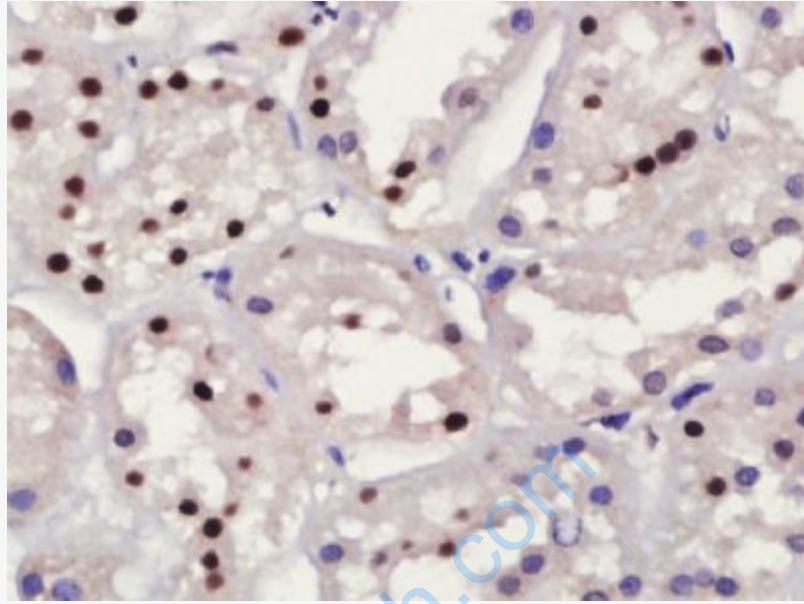
[Unigene: 430589](#)Human

[Unigene: 328206](#)Mouse

[Unigene: 21799](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RNF56) Polyclonal Antibody, Unconjugated (SL5949R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.