10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CBLB Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8668c

Specification

CBLB Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q13191
Other Accession	Q8K4S7, Q3TTA7, Q6NRE7
Reactivity	**Rat**
Predicted	**Xenopus, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**103-130**

CBLB Antibody (Center) - Additional Information

Gene ID 868

Other Names
E3 ubiquitin-protein ligase CBL-B, 632-, Casitas B-lineage lymphoma proto-oncogene b, RING finger protein 56, SH3-binding protein CBL-B, Signal transduction protein CBL-B, CBLB, RNF56

Target/Specificity
This CBLB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-130 amino acids from the Central region of human CBLB.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CBLB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CBLB Antibody (Center) - Protein Information

Name CBLB

Synonyms RNF56

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. In association with CBL, 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. Note=Upon EGF stimulation, associates with endocytic vesicles

Tissue Location
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)

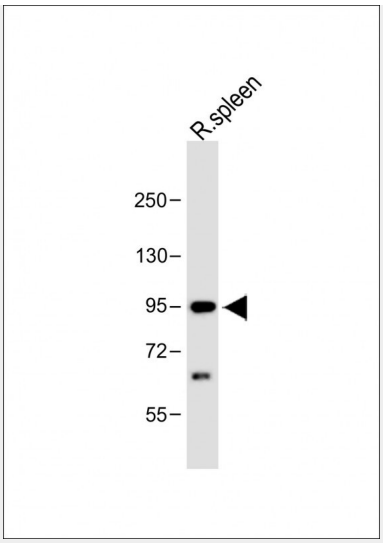
CBLB Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

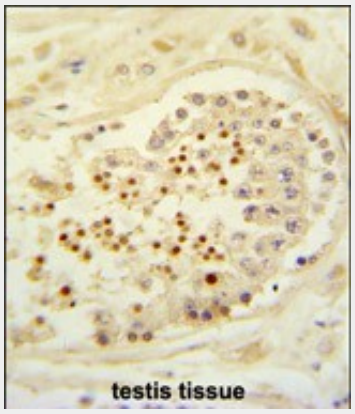
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CBLB Antibody (Center) - Images

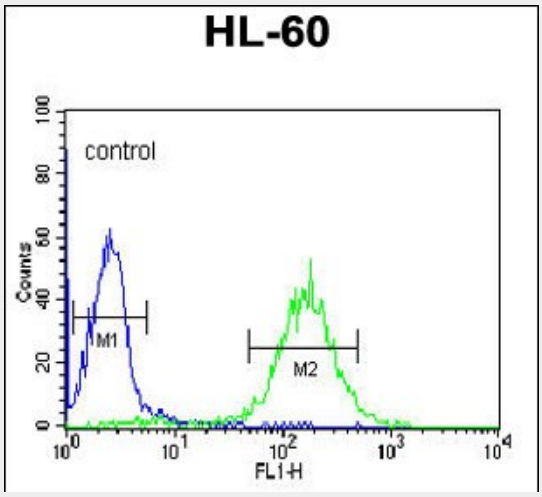
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Anti-CBLB Antibody (Center) at 1:1000 dilution + Rat spleen whole tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 109 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human testis tissue reacted with CBLB Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



CBLB Antibody (Center) (Cat. #AP8668c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control-Rabbit IgG Isotype Control (left histogram).FITC-conjugated

goat-anti-rabbit secondary antibodies were used for the analysis.

CBLB Antibody (Center) - Background

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. It 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. It may also be involved in EGFR ubiquitination and internalization.

CBLB Antibody (Center) - References

Lavagna-Sevenier,C., et.al., J. Biol. Chem. 273 (24), 14962-14967 (1998)
Yokoi,N., et.al., Biochem. Biophys. Res. Commun. 368 (1), 37-42 (2008)