

# **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 <u>Q13191</u>

Other Accession <u>Q8K4S7</u>, <u>Q3TTA7</u>,

O6NRE7

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

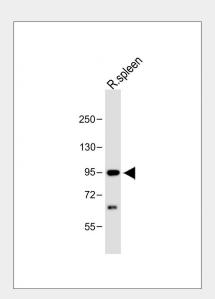
WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### **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



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

Blocking/Dilution buffer: 5% NFDM/TBST.

testis tissue

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.



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**

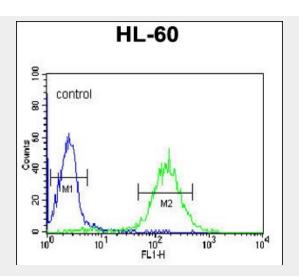
E3 ubiquitin-protein ligase which accepts ubiquitin from specific E2 ubiquitin-conjugating enzymes, and transfers it to substrates, generally promoting their degradation by the proteasome. Negatively regulates TCR (T-cell receptor), BCR (B-cell receptor) and FCER1 (high affinity immunoglobulin epsilon 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



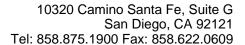
CBLB Antibody (Center) (Cat. #AP8668c) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control-Rabbit IgG Isotype Control (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## 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)





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
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture