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

# CBLB Antibody (Center) Blocking Peptide

**Synthetic peptide**
**Catalog # BP8668c**

## Specification

### CBLB Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q13191

### CBLB Antibody (Center) Blocking Peptide - 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**
The synthetic peptide sequence used to generate the antibody <a href=/products/AP8668c>AP8668c</a> was selected from the Center region of human CBLB. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### CBLB Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

## CBLB Antibody (Center) Blocking Peptide - Images

## CBLB Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)