

# CBLC Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1258a

### **Product Information**

**Application** IHC-P, WB, E **Primary Accession** Q9ULV8 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB0696 **Calculated MW** 52456 **Antigen Region** 424-453

#### **Additional Information**

**Gene ID** 23624

**Other Names** E3 ubiquitin-protein ligase CBL-C, 632-, RING finger protein 57, SH3-binding

protein CBL-3, SH3-binding protein CBL-C, Signal transduction protein CBL-C,

CBLC, CBL3, RNF57

Target/Specificity This CBLC antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 424-453 amino acids from the

C-terminal region of human CBLC.

**Dilution** IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**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** CBLC Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name CBLC

Synonyms CBL3, RNF57

**Function** Acts as an E3 ubiquitin-protein ligase, which accepts ubiquitin from specific

E2 ubiquitin-conjugating enzymes, and then transfers it to substrates promoting their degradation by the proteasome. Functionally coupled with the E2 ubiquitin-protein ligases UB2D1, UB2D2 and UB2D3. Regulator of EGFR mediated signal transduction; upon EGF activation, ubiquitinates EGFR. Isoform 1, but not isoform 2, inhibits EGF stimulated MAPK1 activation. Promotes ubiquitination of SRC phosphorylated at 'Tyr-419'. In collaboration with CD2AP may act as regulatory checkpoint for Ret signaling by modulating the rate of RET degradation after ligand activation; CD2AP converts it from an inhibitor to a promoter of RET degradation; the function limits the potency of GDNF on neuronal survival.

**Tissue Location** 

Ubiquitous..

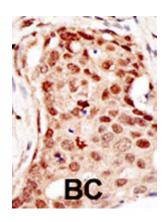
# **Background**

Cbl proteins are a family of ubiquitin protein ligases (E3s) that negatively regulate signaling by targeting activated tyrosine kinases for degradation. Cbl- c is the most recently cloned member of the Cbl proteins and is expressed only in epithelial cells (the other Cbl proteins are ubiquitously expressed). Cbl-c, like the other mammalian Cbl proteins, can ubiquitinate the activated EGFR and target it for degradation. Through interactions with proteins containing SRC homology-2 (SH2) and SH3 domains, CBL proteins modulate downstream cell signaling.

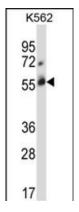
## References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Keane, M.M., et al., Oncogene 18(22):3365-3375 (1999). Kim, M., et al., Gene 239(1):145-154 (1999).

# **Images**



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.



CBLC Antibody (R439) (Cat. #AP1258a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the CBLC antibody detected the CBLC protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.