

Anti-cbl-c (RABBIT) Antibody Cbl-c Antibody Catalog # ASR5324

## **Specification**

## Anti-cbl-c (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, IP, I, LCI This affinity purified antibody has been tested for use in ELISA, immunohistochemistry, immunoprecipitation and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~52 kDa in size corresponding to Cbl-c by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity-purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminal portion of Human Cbl-c.
Preservative	0.01% (w/v) Sodium Azide

# Anti-cbl-c (RABBIT) Antibody - Additional Information

Gene ID 23624

Other Names 23624

#### **Purity**

This affinity purified antibody is directed against human Cbl-c protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest that this antibody would react with Cbl-c from human and chimpanzee sources. Expect partial reactivity against mouse and rat sources of Cbl-c as ~83% sequence homology is on record for the immunogen sequence. Reactivity with Cbl-c from other sources has not been determined. No reactivity is expected with Cbl-a or Cbl-b.

#### **Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted



liquid. Dilute only prior to immediate use.

#### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

# Anti-cbl-c (RABBIT) Antibody - 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..

#### Anti-cbl-c (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-cbl-c (RABBIT) Antibody - Images

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250-			
150-			
100-			
75-			
50-			
37-			
	10.00		
-	100 M		



Immunoprecipitation (right) and western blot (left) using Rockland's Affinity Purified anti-Cbl-c antibody shows detection of a predominant band at ~52 kDa corresponding to Cbl-c. Lysates used are from HEK293T cells transfected with empty vector or with Cbl-c and western blotting (left panel). The predicted size of Cbl-c is 52 kDa. Size markers in kDa are shown to the left of the panel. The (right panel) shows immunoprecipitation with Rabbit anti-Cbl-c followed by western blotting using a Goat anti-Cbl-c antibody. Personal Communication. Stan Lipkowitz, NCI, NIH, Bethesda, MD.

## Anti-cbl-c (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Cbl-c is also known as signal transduction protein CBL-C, SH3-binding protein CBL-C, CBL-3, and RING finger protein 57. Cbl proteins are a family of ubiquitin protein ligases (E3s) that negatively regulate signaling by targeting activated tyrosine kinases for degradation. Cbl-c (a.k.a. Cbl-3) 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. Cbl-c knock out mice show no obvious phenotype. Thus, the physiological role of Cbl-c is not known.