

Basic Information

Product Name	Anti-c-Cbl/CBL Antibody	
Gene Name	CBL	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CBL recombinant protein (Position: A556-T906). Human CBL shares 84% amino acid (aa) sequence identity with mouse CBL.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	120 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF)	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

CBL(Cbl proto-oncogene) is also known as C-CBL, RNF55, CBL2 and E3 ubiquitin protein ligase. CBL is mapped to chromosome 11q23.3-qter by molecular characterization of the breakpoints in 2 somatic cell hybrids. The encoded protein is one of the enzymes required for targeting substrates for degradation by the proteasome. This protein mediates the transfer of ubiquitin from ubiquitin conjugating enzymes(E2) to specific substrates. This protein also contains an N-terminal phosphotyrosine binding domain that allows it to interact with numerous tyrosine-phosphorylated substrates and target them for proteasome degradation. As such it functions as a negative regulator of many signal transduction pathways. This gene has been found to be mutated or

translocated in many cancers including acute myeloid leukaemia. Mutations in this gene are also the cause of Noonan syndrome-like disorder.

Selected Validation Data

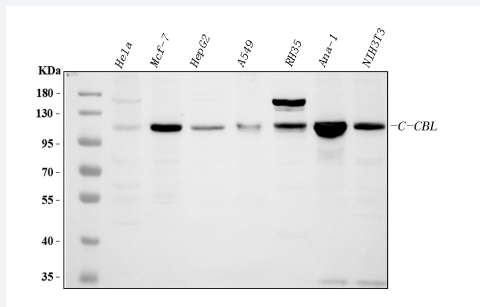


Figure 1. Western blot analysis of anti- CBL antibody (PB0022). The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,
Lane 2: MCF-7 whole cell lysates,
Lane 3: HepG2 whole cell lysates,
Lane 4: A549 whole cell lysates,
Lane 5: RH35 whole cell lysates,
Lane 6: Ana-1 whole cell lysates,
Lane 7: NIH3T3 whole cell lysates.

Use rabbit anti- CBL 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for CBL at approximately 120kD. The expected band size for CBL is at 100,120kD.

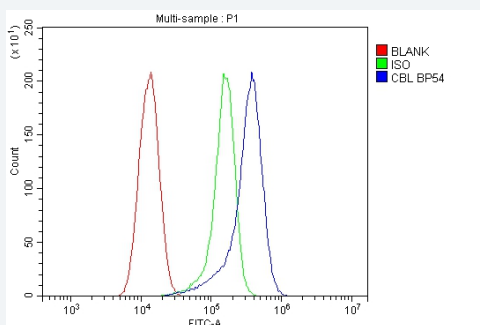


Figure 6. Flow Cytometry analysis of A549 cells using anti-c-Cbl/CBL antibody (PB0022).

Overlay histogram showing A549 cells stained with PB0022 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-c-Cbl/CBL Antibody (PB0022) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.