

#2747 Store at **-20°C**

c-Cbl Antibody

100 µl
 (10 western blots)

Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 867
Swiss-Prot Acc. # P22681

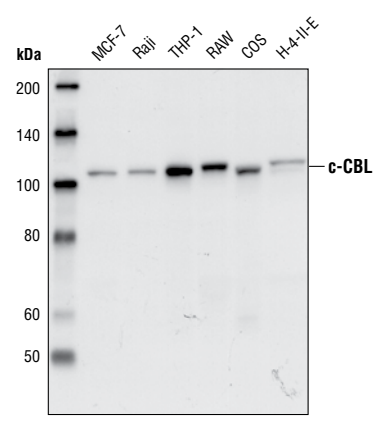
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IF-IC	H, M, R, Mk, (B)	120 kDa	Rabbit**

Background: c-Cbl proto-oncogene is a ubiquitously expressed cytoplasmic adaptor protein that is especially predominant in hematopoietic cells (1,2). c-Cbl is rapidly tyrosine phosphorylated in response to stimulation of a variety of cell-surface receptors and becomes associated with a number of intracellular signaling molecules such as protein tyrosine kinases, phosphatidylinositol 3 kinase, Crk and 14-3-3 proteins (3,4). c-Cbl possesses a highly conserved amino-terminal phosphotyrosine binding domain (TKB) and a C3HC4 RING finger motif. TKB recognizes phosphorylated tyrosines on activated receptor tyrosine kinases (RTKs) as well as other nonreceptor tyrosine kinases. Its RING finger domain recruits ubiquitin-conjugating enzymes. These two domains are primarily responsible for c-Cbl ubiquitin ligase activity and downregulation of RTKs (3). In human cancer tissues, c-Cbl is frequently tyrosine phosphorylated in a tumor-specific manner (5). Phosphorylation of Tyr731 of c-Cbl provides a docking site for downstream signaling components such as p85 and Fyn (6).

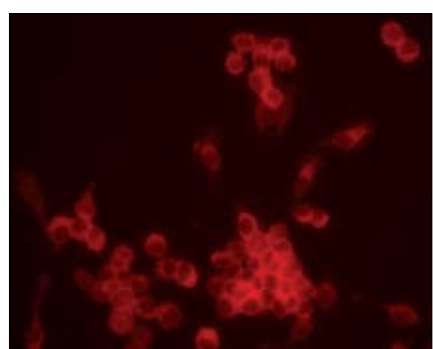
Specificity/Sensitivity: This antibody detects endogenous levels of total c-CBL protein. The antibody may also cross-react with CBL-B protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human c-Cbl. Antibodies are purified by protein A and peptide affinity chromatography.

- Background References:**
- (1) Blake, T.J. et al. (1991) *Oncogene* 6, 653–657.
 - (2) Thien, C.B. and Langdon, W.Y. (1998) *Immunol. Cell Biol.* 76, 473–482.
 - (3) Christine, B.F. et al. (2001) *Nat. Rev. Mol. Cell Biol.* 2, 294–307.
 - (4) Feshchenko, E.A. et al. (1998) *J. Biol. Chem.* 273, 8323–8331.
 - (5) Kamei, T. et al. (2000) *Int. J. Oncol.* 17, 335–339.
 - (6) Hunter, C. et al. (1999) *J. Biol. Chem.* 274, 2097–2106.



Western blot analysis of lysates from MCF-7, Raji, THP-1, RAW, COS and H-4-II-E cells, using c-CBL antibody.



Immunofluorescent staining of paraformaldehyde-fixed RAW cells, using c-CBL antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at **-20°C**. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.