

#3555 Store at -20°C

Phospho-c-Cbl (Tyr774) Antibody

100 µl
 (10 western blots)



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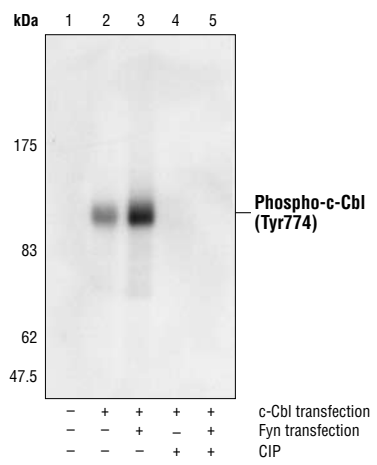
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP Endogenous	H	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: Phospho-c-Cbl (Tyr774) Antibody detects endogenous levels of c-Cbl only when phosphorylated at tyrosine 774. The antibody does not cross-react with related tyrosine-phosphorylated proteins.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr774 of human c-Cbl. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from 293-T cells transfected with c-Cbl and Fyn (lanes 3 and 5) or without Fyn (lanes 2 and 4), untreated or calf intestinal phosphatase (CIP)-treated, using Phospho-c-Cbl (Tyr774) Antibody. (Lysates provided by Dr. A.L. Reddi, laboratory of Dr. Hamid Band, Harvard University, Massachusetts.)

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

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

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.

Background References:

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

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

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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.