



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

c-Cbl Antibody

Store at -20C
#2747

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IF-IC	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 120	Source/Isotype: Rabbit	UniProt ID: #P22681	Entrez-Gene Id: 867
--------------------------------------	--------------------------------	-----------------------------------	-------------------------	----------------------------------	-------------------------------	-------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:50

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.

Specificity/Sensitivity

This antibody detects endogenous levels of total c-Cbl protein. The antibody may also cross-react with Cbl-b protein.

Species predicted to react based on 100% sequence homology

Bovine

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

The 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. The TKB recognizes phosphorylated tyrosines on activated receptor tyrosine kinases (RTKs) as well as other nonreceptor tyrosine kinases. The RING finger motif recruits ubiquitin-conjugating enzymes. These two domains are primarily responsible for the ubiquitin ligase activity of c-Cbl and downregulation of RTKs (3). Research studies have indicated that 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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary 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 Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.