

Cbl (C-15): sc-170

BACKGROUND

Cbl (also designated the c-Cbl proto-oncogene, E3 ubiquitin-protein ligase CBL, Casitas B-lineage lymphoma proto-oncogene and RING finger protein 55) has been identified as the cellular homolog of the v-Cbl oncogene isolated from an NFS/N mouse that developed a pre-B cell lymphoma following infection with the replication-competent Cas Br-M murine leukemic virus. c-Cbl is expressed at relatively high levels in a wide range of hematopoietic tumor cell lines as well as in normal tissues such as thymus and testis. The c-Cbl gene product has been identified as a cytoplasmic protein with apparent DNA binding and dimerization domains characteristic of transcription factors. A single c-Cbl locus termed CBL2 has been mapped to human chromosome 11q23.3. This region of chromosome 11 is involved in translocations and deletions in a broad range of leukemias; c-Cbl has been found to be translocated from chromosome 11 in leukemias with either t(4;11) or t(11;14) abnormalities.

CHROMOSOMAL LOCATION

Genetic locus: CBL (human) mapping to 11q23.3; Cbl (mouse) mapping to 9A5.1.

SOURCE

Cbl (C-15) is available as either rabbit (sc-170) or goat (sc-170-G) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of Cbl of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-170 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-170 AC, 500 µg/0.25 ml agarose in 1 ml., fluorescein (sc-170 FITC) or rhodamine (sc-170 TRITC) conjugates for immunofluorescence, 200 µg/ml., Alexa Fluor[®] 405 (sc-170 AF405), Alexa Fluor[®] 488 (sc-170 AF488) or Alexa Fluor[®] 647 (sc-170 AF647) conjugates for immunofluorescence; 100 µg/2 ml.

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APPLICATIONS

Cbl (C-15) is recommended for detection of normal and rearranged forms of Cbl of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Cbl (C-15) is also recommended for detection of Cbl in additional species, including equine, canine, bovine, porcine and avian.

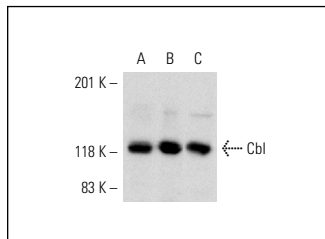
Suitable for use as control antibody for Cbl siRNA (h): sc-29242, Cbl siRNA (m): sc-29949, Cbl shRNA Plasmid (h): sc-29242-SH, Cbl shRNA Plasmid (m): sc-29949-SH, Cbl shRNA (h) Lentiviral Particles: sc-29242-V and Cbl shRNA (m) Lentiviral Particles: sc-29949-V.

Molecular Weight of Cbl: 120 kDa.

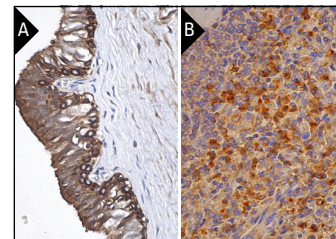
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Cbl (C-15): sc-170. Western blot analysis of Cbl expression in 3T3-L1 (A), NIH/3T3 (B) and IB4 (C) whole cell lysates.



Cbl (C-15): sc-170. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and cells in red pulp (B).

SELECT PRODUCT CITATIONS

1. Tanaka, S., et al. 1996. c-Cbl is downstream of c-Src in a signalling pathway necessary for bone resorption. *Nature* 383: 528-531.
2. Zumaquero, E., et al. 2010. Exosomes from human lymphoblastoid B cells express enzymatically active CD38 that is associated with signaling complexes containing CD81, Hsc-70 and Lyn. *Exp. Cell Res.* 316: 2692-2706.
3. van Duijn, T.J., et al. 2010. Rac1 recruits the adapter protein CMS/CD2AP to cell-cell contacts. *J. Biol. Chem.* 285: 20137-20146.
4. Ruschmann, J., et al. 2010. Tyrosine phosphorylation of SHIP promotes its proteasomal degradation. *Exp. Hematol.* 38: 392-402.
5. Song, S., et al. 2011. A requirement for the p85 PI3K adapter protein BCAP in the protection of macrophages from apoptosis induced by endoplasmic reticulum stress. *J. Immunol.* 187: 619-625.
6. Castiel, A., et al. 2011. The Stil protein regulates centrosome integrity and mitosis through suppression of Chfr. *J. Cell Sci.* 124: 532-539.
7. Dergai, M., et al. 2011. Identification and characterization of a novel mammalian isoform of the endocytic adaptor ITSN1. *Gene* 485: 120-129.
8. Büchse, T., et al. 2011. CIN85 interacting proteins in B cells-specific role for SHIP-1. *Mol. Cell. Proteomics* 10: M110.
9. Reicher, B., et al. 2012. Ubiquitylation-dependent negative regulation of WASp is essential for actin cytoskeleton dynamics. *Mol. Cell. Biol.* 32: 3153-3163.
10. Gasparrini, F., et al. 2012. Syk-dependent regulation of Hrs phosphorylation and ubiquitination upon FcεRI engagement: impact on Hrs membrane/cytosol localization. *Eur. J. Immunol.* 42: 2744-2753.

RESEARCH USE

For research use only, not for use in diagnostic procedures.