

Cbl-3 (C-17): sc-8372

BACKGROUND

The c-Cbl proto-oncogene 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 120 kDa nuclear protein with apparent DNA binding and dimerization domains characteristic of transcription factors. A single c-Cbl locus termed Cbl-2 has been mapped to human chromosome 11q23. Two proteins related to c-Cbl have been identified as Cbl-b and Cbl-3. Cbl-b has a predicted molecular weight of 108 kDa, with a proline-rich domain, a nuclear localization signal, a C3HC4 zinc finger and a putative leucine zipper. Cbl-b is expressed in normal and malignant mammary epithelial cells, various normal tissues and hematopoietic tissue and cell lines. Data suggests that Cbl-b encodes a protein which can interact with signal transduction proteins to regulate their function or be regulated by them.

REFERENCES

1. Regnier, D.C., et al. 1989. Identification of two murine loci homologous to the v-Cbl oncogene. *J. Virol.* 63: 3678-3682.
2. Langdon, W.Y., et al. 1989. The c-Cbl proto-oncogene is preferentially expressed in thymus and testis tissue and encodes a nuclear protein. *J. Virol.* 63: 5420-5424.
3. Langdon, W.Y., et al. 1989. v-Cbl, an oncogene from a dual-recombinant murine retrovirus that induces early B-lineage lymphomas. *Proc. Natl. Acad. Sci. USA* 86: 1168-1172.
4. Blake, T.J., et al. 1991. The sequences of the human and mouse c-Cbl proto-oncogenes show v-Cbl was generated by a large truncation encompassing a proline-rich domain and a leucine zipper-like motif. *Oncogene* 6: 653-657.
5. Keane, M.M., et al. 1995. Cloning and characterization of Cbl-b: a SH3 binding protein with homology to the c-Cbl proto-oncogene. *Oncogene* 10: 2367-2377.

CHROMOSOMAL LOCATION

Genetic locus: CBL (human) mapping to 19q13.2.

SOURCE

Cbl-3 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Cbl-3 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-8372 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

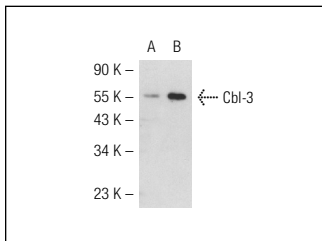
Cbl-3 (C-17) is recommended for detection of Cbl-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Cbl-3 siRNA (h): sc-40390, Cbl-3 shRNA Plasmid (h): sc-40390-SH and Cbl-3 shRNA (h) Lentiviral Particles: sc-40390-V.

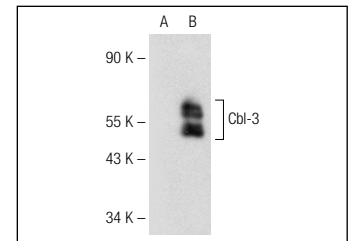
Molecular Weight of Cbl-3: 52 kDa.

Positive Controls: Cbl-3 (h3): 293T Lysate: sc-176341 or Cbl-3 (h2): 293T Lysate: sc-176246.

DATA



Cbl-3 (C-17): sc-8372. Western blot analysis of Cbl-3 expression in non-transfected: sc-117752 (A) and human Cbl-3 transfected: sc-176341 (B) 293T whole cell lysates.



Cbl-3 (C-17): sc-8372. Western blot analysis of Cbl-3 expression in non-transfected: sc-117752 (A) and human Cbl-3 transfected: sc-176246 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Davies, G.C., et al. 2006. EGFRvIII undergoes activation-dependent down-regulation mediated by the Cbl proteins. *Oncogene* 25: 6497-6509.
2. Yang, W.H., et al. 2011. Epigallocatechin-3-gallate induces cell apoptosis of human chondrosarcoma cells through apoptosis signal-regulating kinase 1 pathway. *J. Cell. Biochem.* 112: 1601-1611.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Cbl-3 (F-2): sc-390648** or **Cbl-3 (G-6): sc-390649**, our highly recommended monoclonal alternatives to Cbl-3 (C-17).