

Cbl-3 (h3): 293T Lysate: sc-176341

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. 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. Two proteins related to c-Cbl have been identified as Cbl-b (RING finger protein 56) and Cbl-3 (RING finger protein 57). Cbl-b has 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 that can interact with signal transduction proteins to regulate their function or be regulated by them.

REFERENCES

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- Regnier, D.C., Kozak, C.A., Kingsley, D.M., Jenkins, N.A., Copeland, N.G., Langdon, W.Y. and Morse, H.C. 1989. Identification of two murine loci homologous to the v-Cbl oncogene. *J. Virol.* 63: 3678-3682.
- Langdon, W.Y., Hyland, C.D., Grumont, R.J. and Morse, H.C. III. 1989. The c-Cbl proto-oncogene is preferentially expressed in thymus and testis tissue and encodes a nuclear protein. *J. Virol.* 63: 5420-5424.
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- Keane, M.M., Rivero-Lezcano, O.M., Mitchell, J.A., Robbins, K.C. and Lipkowitz, S. 1995. Cloning and characterization of Cbl-b: a SH3 binding protein with homology to the c-Cbl proto-oncogene. *Oncogene* 10: 2367-2377.
- Hartley, D. and Corvera, S. 1996. Formation of c-Cbl phosphatidylinositol 3-kinase complexes on lymphocyte membranes by a p56lck-independent mechanism. *J. Biol. Chem.* 271: 21939-21943.
- Keane, M.M., Ettenberg, S.A., Nau, M.N., Banerjee, P., Cuello, M., Penninger, J. and Lipkowitz, S. 1999. Cbl-3: a new mammalian Cbl family protein. *Oncogene* 18: 3365-3375.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: CBLC (human) mapping to 19q13.32.

PRODUCT

Cbl-3 (h3): 293T Lysate represents a lysate of human Cbl-3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Cbl-3 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Cbl-3 antibodies. Recommended use: 10-20 µl per lane.

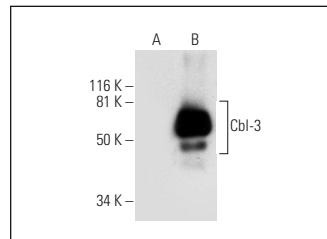
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Cbl-3 (G-6): sc-390649 is recommended as a positive control antibody for Western Blot analysis of enhanced human Cbl-3 expression in Cbl-3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

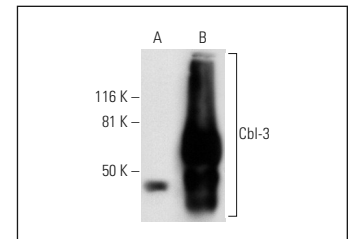
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Cbl-3 (G-6): sc-390649. 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 (F-2): sc-390648. 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.

RESEARCH USE

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

PROTOCOLS

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