

p-Cbl (Tyr 700)-R: sc-26140-R

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 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 trans-locations 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.

REFERENCES

- Yunis, J.J. and Brunning, R.D. 1986. Prognostic significance of chromosomal abnormalities in acute leukemias and myelodysplastic syndromes. *Clin. Haematol.* 15: 597-620.
- 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.
- Regnier, D.C., et al. 1989. Identification of two murine loci homologous to the v-Cbl oncogene. *J. Virol.* 63: 3678-3682.
- 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.
- 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.
- Savage, P.D., et al. 1991. Relation-ship of the human proto-oncogene CBL2 on 11q23 to the t(4;11), t(11;22) and t(11;14) breakpoints. *Cytogenet. Cell Genet.* 2: 112-115.

CHROMOSOMAL LOCATION

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

SOURCE

p-Cbl (Tyr 700)-R is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Tyr 700 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-26140 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Cbl (Tyr 700)-R is recommended for detection of Tyr 700 phosphorylated 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

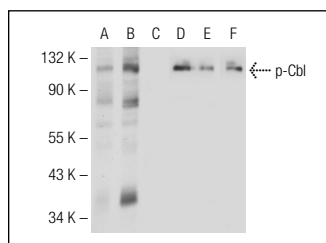
p-Cbl (Tyr 700)-R is also recommended for detection of correspondingly phosphorylated Tyr on Cbl in additional species, including equine, bovine and porcine.

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 p-Cbl: 120 kDa.

Positive Controls: Jurkat + pervanadate cell lysate: sc-24716 or Jurkat whole cell lysate: sc-2204.

DATA



Western blot analysis of c-Cbl phosphorylation in untreated (A, D), pervanadate treated (B, E) and pervanadate and lambda protein phosphatase (sc-200312A) treated (C, F) Jurkat whole cell lysates. Antibodies tested include p-Cbl (Tyr 700)-R: sc-26140-R (A, B, C) and Cbl (A-9): sc-1651 (D, E, F).

SELECT PRODUCT CITATIONS

- Wen, X.R., et al. 2008. Dual inhibitory roles of geldanamycin on the c-Jun NH₂-terminal kinase 3 signal pathway through suppressing the expression of mixed-lineage kinase 3 and attenuating the activation of apoptosis signal-regulating kinase 1 via facilitating the activation of Akt in ischemic brain injury. *Neuroscience* 156: 483-497.
- Orinska, Z., et al. 2010. I787 provides signals for c-Kit receptor internalization and functionality that control mast cell survival and development. *Blood* 116: 2665-2675.

STORAGE

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

RESEARCH USE

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