SANTA CRUZ BIOTECHNOLOGY, INC.

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

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

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 Thr 198 of p27 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).

STORAGE

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

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), 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).

p-Cbl (Tyr 700)-R is also recommended for detection of correspondingly phosphorylated 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.

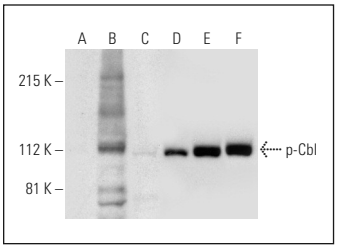
Molecular Weight of p-Cbl: 120 kDa.

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

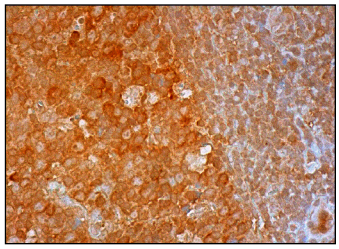
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Western Blotting Luminol Reagent: sc-2048 and Lambda Phosphatase: sc-200312A. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Western blot analysis of 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**).



p-Cbl (Tyr 700)-R: sc-26140-R. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic and nuclear staining of cells in germinal center and nuclear staining of cells in non-germinal center.

SELECT PRODUCT CITATIONS

1. Wen, X.R., et al. 2008. Dual inhibitory roles of geldanamycin on the c-Jun NH_2-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.
2. 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.

RESEARCH USE

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