Cbl-b (G-1): sc-8006

**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 leukemia virus. Cbl-b 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.

**CHROMOSOMAL LOCATION**

Genetic locus: CBLB (human) mapping to 3q13.11; Cblb (mouse) mapping to 16 B5.

**SOURCE**

Cbl-b (G-1) is a mouse monoclonal antibody raised against amino acids 29-483 mapping at the N-terminus of Cbl-b of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cbl-b (G-1) is available conjugated to agarose (sc-8006 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8006 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8006 PE), fluorescein (sc-8006 FITC), Alexa Fluor® 546 (sc-8006 AF546), Alexa Fluor® 594 (sc-8006 AF594) or Alexa Fluor® 647 (sc-8006 AF647), 200 µg/ml, for WB, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8006 AF680) or Alexa Fluor® 790 (sc-8006 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

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

**APPLICATIONS**

Cbl-b (G-1) is recommended for detection of Cbl-b 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).


Molecular Weight of Cbl-b: 115-120 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, NAMALWA cell lysate: sc-2234 or BJAB whole cell lysate: sc-2207.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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