SANTA CRUZ BIOTECHNOLOGY, INC.

CBLL1 (S-14): sc-131888



BACKGROUND

CBLL1 (Casitas B-lineage lymphoma-transforming sequence-like protein 1), also known as HAKAI (meaning "destruction" in Japanese), or RNF188 (RING finger protein 188), is a 491 amino acid protein that contains one C_2H_2 -type zinc finger and one RING-type zinc finger. CBLL1 is believed to function as an E3 ubiquitin-protein ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfers that residue to a protein that is targeted for degradation. More specifically, upon activation of c-Src, CBLL1 interacts with and ubiquitinates tyrosine-phosphorylated E-cadherin, thereby targeting the E-cadherin complex for endocytosis and disrupting epithelial cell-cell contacts. Via its role as an E-cadherin regulator, CBLL1 participates in cell adhesion and may also be involved in the regulation of epithelial-mesenchymal transitions.

REFERENCES

- Fujita, Y., Krause, G., Scheffner, M., Zechner, D., Leddy, H.E., Behrens, J., Sommer, T. and Birchmeier, W. 2002. Hakai, a c-Cbl-like protein, ubiquitinates and induces endocytosis of the E-cadherin complex. Nat. Cell Biol. 4: 222-231.
- Pece, S. and Gutkind, J.S. 2002. E-cadherin and Hakai: signalling, remodeling or destruction? Nat. Cell Biol. 4: E72-E74.
- 3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606872. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Frame, M.C. 2004. Newest findings on the oldest oncogene; how activated Src does it. J. Cell Sci. 117: 989-998.
- Carter, O., Bailey, G.S. and Dashwood, R.H. 2004. The dietary phytochemical chlorophyllin alters E-cadherin and β-catenin expression in human colon cancer cells. J. Nutr. 134: 3441S-3444S.
- Heo, H.S., Kim, J.H., Lee, Y.J., Kim, S.H., Cho, Y.S. and Kim, C.G. 2005. Microarray profiling of genes differentially expressed during erythroid differentiation of murine erythroleukemia cells. Mol. Cells 20: 57-68.
- Okoruwa, O.E., Weston, M.D., Sanjeevi, D.C., Millemon, A.R., Fritzsch, B., Hallworth, R. and Beisel, K.W. 2008. Evolutionary insights into the unique electromotility motor of mammalian outer hair cells. Evol. Dev. 10: 300-315.

CHROMOSOMAL LOCATION

Genetic locus: CBLL1 (human) mapping to 7q22.3; Cbl11 (mouse) mapping to 12 A3.

SOURCE

CBLL1 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CBLL1 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-131888 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CBLL1 (S-14) is recommended for detection of CBLL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CBLL1 (S-14) is also recommended for detection of CBLL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CBLL1 siRNA (h): sc-89853, CBLL1 siRNA (m): sc-142035, CBLL1 shRNA Plasmid (h): sc-89853-SH, CBLL1 shRNA Plasmid (m): sc-142035-SH, CBLL1 shRNA (h) Lentiviral Particles: sc-89853-V and CBLL1 shRNA (m) Lentiviral Particles: sc-142035-V.

Molecular Weight of CBLL1: 55 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or COLO 320DM cell lysate: sc-2226.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **CBLL1 (3B12):** sc-517157, our highly recommended monoclonal alternative to CBLL1 (S-14).