



CBLL1 (h): 293T Lysate: sc-114604

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 C₂H₂-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

1. 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.
2. 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.
5. 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.
6. 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.
7. Okoruwa, O.E., Weston, M.D., Sanjeevi, D.C., Millemon, A.R., Fritzsche, 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.

PRODUCT

CBLL1 (h): 293T Lysate represents a lysate of human CBLL1 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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.

RESEARCH USE

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

APPLICATIONS

CBLL1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CBLL1 antibodies. Recommended use: 10-20 μ l per lane.

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

PROTOCOLS

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