



Cortactin (m): 293T Lysate: sc-126659

BACKGROUND

Cortactin (also designated Ems-1) is a filamentous Actin (F-Actin) binding protein that has been shown to be a substrate for Src p60. Cortactin contains tandem 37 amino acid repeats at the amino-terminus and an SH3 domain at the carboxy-terminus. The tandem repeats appear to be necessary for F-Actin binding. Tyrosine phosphorylation of Cortactin by Src p60 results in diminished F-Actin binding to Cortactin and reduced F-Actin cross-linking activity. Cortactin has also been shown to be phosphorylated in response to FGF-1. Cortactin exhibits abundant expression in megakaryocytes and platelets, and it may play a role in the maturation of megakaryocytes.

REFERENCES

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2. Zhan, X., Hu, X., Hampton, B., Burgess, W.H., Friesel, R., and Maciag, T. 1993. Murine cortactin is phosphorylated in response to fibroblast growth factor-1 on tyrosine residues late in the G₁ phase of the BALB/c 3T3 cell cycle. *J. Biol. Chem.* 268: 24427-24431.
3. Zhan, X., Plourde, C., Hu, X., Friesel, R., and Maciag, T. 1994. Association of fibroblast growth factor receptor-1 with c-Src correlates with association between c-Src and cortactin. *J. Biol. Chem.* 269: 20221-20224.
4. Okamura, H. and Resh, M.D. 1995. p80/85 cortactin associates with the Src SH2 domain and colocalizes with v-Src in transformed cells. *J. Biol. Chem.* 270: 26613-26618.
5. Huang, C., Ni, Y., Wang, T., Gao, Y., Haudenschild, C.C., and Zhan, X. 1997. Down-regulation of the filamentous actin cross-linking activity of cortactin by Src-mediated tyrosine phosphorylation. *J. Biol. Chem.* 272: 13911-13915.
6. Zhan, X., Haudenschild, C.C., Ni, Y., Smith, E., and Huang, C. 1997. Upregulation of cortactin expression during the maturation of megakaryocytes. *Blood* 89: 457-464.

CHROMOSOMAL LOCATION

Genetic locus: Ctnn (mouse) mapping to 7 F5.

PRODUCT

Cortactin (m): 293T Lysate represents a lysate of mouse Cortactin transfected 293T cells and is provided as 100 µg protein in 200 µl 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.

PROTOCOLS

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

APPLICATIONS

Cortactin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Cortactin antibodies. Recommended use: 10-20 µl per lane.

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

RESEARCH USE

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