



NET1 (h): 293T Lysate: sc-113505

BACKGROUND

Numerous cellular functions, such as proliferation, differentiation, apoptosis, vesicular trafficking, nuclear transport and cytoskeletal organization, are controlled by GTPases. It has become increasingly clear that GTPases act in cascades in which their activities are linked by GTPase-activating proteins (GAPs) and guanine nucleotide exchange factors (GEFs). Researchers looking for new epithelial cell-specific oncogenes, using a highly efficient cDNA expression cloning system, have isolated the Ost oncogene from rat osteosarcoma cells. The Ost proto-oncogene protein contains DH and PH domains, catalyzes guanine nucleotide exchange on RhoA and Cdc42, and interacts specifically with the GTP-bound form of Rac1. The related NET1 protein also contains a DH domain and is ubiquitously expressed in a variety of tissues. Overexpression of NET1 in NIH/3T3 cells results in altered growth properties and tumorigenesis when injected into nude mice.

REFERENCES

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2. Ron, D., et al. 1991. A region of proto-Dbl essential for its transforming activity shows sequence similarity to a yeast cell cycle gene, Cdc24, and the human breakpoint cluster gene, Bcr. *New Biol.* 3: 372-379.
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4. Boguski, M.S. and McCormick, F. 1993. Proteins regulating Ras and its relatives. *Nature* 366: 643-654.
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6. Hart, M.J., et al. 1994. Cellular transformation and guanine nucleotide exchange activity are catalyzed by a common domain on the Dbl oncogene product. *J. Biol. Chem.* 269: 62-65.
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8. Chan, A.M., et al. 1996. Isolation of a novel oncogene, NET1, from neuroepithelioma cells by expression of cDNA cloning. *Oncogene* 12: 1259-1266.

CHROMOSOMAL LOCATION

Genetic locus: NET1 (human) mapping to 10p15.1.

PRODUCT

NET1 (h): 293T Lysate represents a lysate of human NET1 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.

APPLICATIONS

NET1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NET1 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.

PROTOCOLS

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