

TBC1D8 (m): 293T Lysate: sc-123937

BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. TBC1D8 (TBC1 domain family member 8), also known as VRP (vascular Rab GAP/TBC-containing protein), AD3 or HBLP1, is an 897 amino acid protein that is thought to function as a GTPase-activator for Rab proteins. TBC1D8 contains one GRAM domain and one Rab GAP TBC domain, the latter of which is a highly conserved 200 amino acid motif that conveys the catalytic activity of GTPase-activating proteins. The gene encoding TBC1D8 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome.

REFERENCES

1. Albert, S., Will, E. and Gallwitz, D. 1999. Identification of the catalytic domains and their functionally critical arginine residues of two yeast GTPase-activating proteins specific for Ypt/Rab transport GTPases. *EMBO J.* 18: 5216-5225.
2. Yonekura, H., Migita, H., Sakurai, S., Wang, H., Harada, S., Abedin, M.J., Yamagishi, S. and Yamamoto, H. 1999. Antisense display—a method for functional gene screening: evaluation in a cell-free system and isolation of angiogenesis-related genes. *Nucleic Acids Res.* 27: 2591-2600.
3. Xu, Y.C., Wu, R.F., Gu, Y., Yang, Y.S., Yang, M.C., Nwariaku, F.E. and Terada, L.S. 2002. Involvement of TRAF4 in oxidative activation of c-Jun N-terminal kinase. *J. Biol. Chem.* 277: 28051-28057.
4. Itoh, T., Satoh, M., Kanno, E. and Fukuda, M. 2006. Screening for target Rabs of TBC (Tre-2/Bub2/Cdc16) domain-containing proteins based on their Rab-binding activity. *Genes Cells* 11: 1023-1037.
5. Sklan, E.H., Staschke, K., Oakes, T.M., Elazar, M., Winters, M., Aroeti, B., Danieli, T. and Glenn, J.S. 2007. A RabGAP TBC domain protein binds hepatitis C virus NS5A and mediates viral replication. *J. Virol.* 81: 11096-11105.
6. Ishibashi, K., Kanno, E., Itoh, T. and Fukuda, M. 2009. Identification and characterization of a novel Tre-2/Bub2/Cdc16 (TBC) protein that possesses Rab3A-GAP activity. *Genes Cells* 14: 41-52.

CHROMOSOMAL LOCATION

Genetic locus: Tbc1d8 (mouse) mapping to 1 B.

PRODUCT

TBC1D8 (m): 293T Lysate represents a lysate of mouse TBC1D8 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

TBC1D8 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive TBC1D8 antibodies. Recommended use: 10-20 µl per lane.

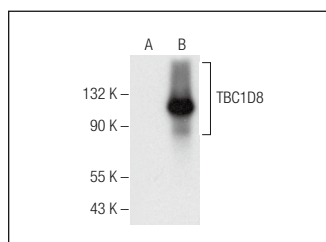
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TBC1D8 (B-5): sc-376637 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse TBC1D8 expression in TBC1D8 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



TBC1D8 (B-5): sc-376637. Western blot analysis of TBC1D8 expression in non-transfected: sc-117752 (A) and mouse TBC1D8 transfected: sc-123937 (B) 293T whole cell lysates.

RESEARCH USE

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