# TBC1D10B (Q-24): sc-102128



The Power to Question

#### **BACKGROUND**

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. TBC1D10B (TBC1 domain family member 10B), also known as FP2461, is a 533 amino acid protein that contains one Rab-GAP TBC domain, a highly conserved 200 amino acid motif that conveys the the catalytic activity of GTPase-activating proteins. Via its Rab-GAP domain, TBC1D10B is thought to function as a GTPase-activating protein that may regulate the activity of target Rab proteins. TBC1D10B exists as two alternatively spliced isoforms which are encoded by a gene that is located on chromosome 16.

## **REFERENCES**

- Neuwald, A.F. 1997. A shared domain between a spindle assembly checkpoint protein and Ypt/Rab-specific GTPase-activators. Trends Biochem. Sci. 22: 243-244.
- 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.
- 3. Rak, A., Fedorov, R., Alexandrov, K., Albert, S., Goody, R.S., Gallwitz, D. and Scheidig, A.J. 2000. Crystal structure of the GAP domain of Gyp1p: first insights into interaction with Ypt/Rab proteins. EMBO J. 19: 5105-5113.
- Beausoleil, S.A., Jedrychowski, M., Schwartz, D., Elias, J.E., Villén, J., Li, J., Cohn, M.A., Cantley, L.C. and Gygi, S.P. 2004. Large-scale characterization of HeLa cell nuclear phosphoproteins. Proc. Natl. Acad. Sci. USA 101: 12130-12135.
- Choy, K.W., Wang, C.C., Ogura, A., Lau, T.K., Rogers, M.S., Ikeo, K., Gojobori, T., Lam, D.S. and Pang, C.P. 2006. Genomic annotation of 15,809 ESTs identified from pooled early gestation human eyes. Physiol. Genomics 25: 9-15.

# **CHROMOSOMAL LOCATION**

Genetic locus: TBC1D10B (human) mapping to 16p11.2.

# **SOURCE**

TBC1D10B (Q-24) is a purified rabbit polyclonal antibody raised against TBC1D10B of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **PROTOCOLS**

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

#### **APPLICATIONS**

TBC1D10B (0-24) is recommended for detection of TBC1D10B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TBC1D10B siRNA (h): sc-93097, TBC1D10B shRNA Plasmid (h): sc-93097-SH and TBC1D10B shRNA (h) Lentiviral Particles: sc-93097-V.

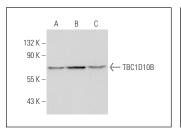
Molecular Weight of TBC1D10B: 61 kDa.

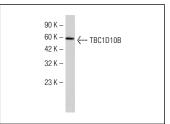
Positive Controls: Hep G2 cell lysate: sc-2227, HEK293 whole cell lysate: sc-45136 or HeLa whole cell lysate: sc-2200.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

# DATA





TBC1D10B (Q-24): sc-102128. Western blot analysis of TBC1D10B expression in HEK293 (**A**), HeLa (**B**) and Jurkat (**C**) whole cell lysates.

TBC1D10B (0-24): sc-102128. Western blot analysis of TBC1D10B expression in Hep G2 whole cell lysate.

## **RESEARCH USE**

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

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