

TACC3 (H-300): sc-22773

BACKGROUND

TACC1 (transforming acidic coiled coil gene 1) is one of three TACC family members, which are thought to be involved in breast tumorigenesis. TACC1 is located on 8p11, in a chromosomal region that is amplified in approximately 15% of all breast tumor samples. The short arm of chromosome 8 also contains FGFR1, whose expression is enhanced in most breast cancer tumors. TACC family members TACC1, TACC2, and TACC3 map very closely to the corresponding FGFR1, FGFR2, FGFR3 genes on chromosomes 4, 8 and 10. Subsequently, since they are phylogenetically related, it is proposed that TACC and FGFR have similar roles in cell growth and differentiation. Also, TACC1 contains a conserved C-terminal region as in the *Drosophila* homolog D-TACC. D-TACC has been shown to be necessary for normal spindle function, and the mammalian TACC proteins appears to interact with centrosomes and microtubules in a similar manner.

REFERENCES

- Dib, A., et al. 1995. Characterization of the region of the short arm of chromosome 8 amplified in breast carcinoma. *Oncogene* 10: 995-1001.
- Yoshimura, N., et al. 1998. The expression and localization of fibroblast growth factor-1 (FGF-1) and FGF receptor-1 (FGFR-1) in human breast cancer. *Clin. Immunol. Immunopathol.* 89: 28-34.

CHROMOSOMAL LOCATION

Genetic locus: TACC3 (human) mapping to 4p16.3; Tacc3 (mouse) mapping to 5 B2.

SOURCE

TACC3 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of TACC3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TACC3 (H-300) is recommended for detection of TACC3 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TACC3 siRNA (h): sc-36602, TACC3 siRNA (m): sc-36603, TACC3 shRNA Plasmid (h): sc-36602-SH, TACC3 shRNA Plasmid (m): sc-36603-SH, TACC3 shRNA (h) Lentiviral Particles: sc-36602-V and TACC3 shRNA (m) Lentiviral Particles: sc-36603-V.

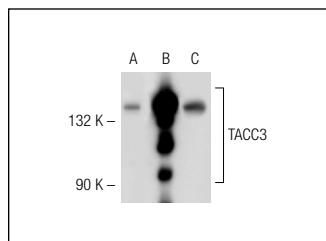
Molecular Weight of TACC3: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, TACC3 (h): 293T Lysate: sc-111721 or Jurkat whole cell lysate: sc-2204.

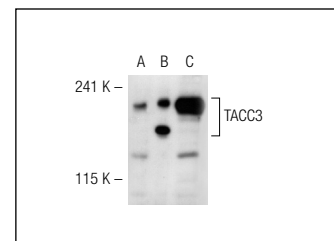
STORAGE

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

DATA



TACC3 (H-300): sc-22773. Western blot analysis of TACC3 expression in non-transfected 293T: sc-117752 (A), human TACC3 transfected 293T: sc-111721 (B) and HeLa (C) whole cell lysates.



TACC3 (H-300): sc-22773. Western blot analysis of TACC3 expression in non-transfected 293T: sc-117752 (A), mouse TACC3 transfected 293T: sc-123890 (B) and Jurkat (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Jung, C.K., et al. 2006. Expression of transforming acidic coiled-coil containing protein 3 is a novel independent prognostic marker in non-small cell lung cancer. *Pathol. Int.* 56: 503-509.
- Schneider, L., et al. 2007. The transforming acidic coiled coil 3 protein is essential for spindle-dependent chromosome alignment and mitotic survival. *J. Biol. Chem.* 282: 29273-29283.
- Ulisse, S., et al. 2007. Transforming acidic coiled-coil 3 and Aurora-A interact in human thyrocytes and their expression is deregulated in thyroid cancer tissues. *Endocr. Relat. Cancer* 14: 827-837.
- LeRoy, P.J., et al. 2007. Localization of human TACC3 to mitotic spindles is mediated by phosphorylation on Ser558 by Aurora A: a novel pharmacodynamic method for measuring Aurora A activity. *Cancer Res.* 67: 5362-5370.
- Bird, A.W., et al. 2012. High-efficiency counterselection recombineering for site-directed mutagenesis in bacterial artificial chromosomes. *Nat. Methods* 9: 103-109.

RESEARCH USE

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

PROTOCOLS

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



Try **TACC3 (C-2): sc-376883** or **TACC3 (E-4): sc-376900**, our highly recommended monoclonal alternatives to TACC3 (H-300).