

# TACC1 (G-18): sc-5881

## 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 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. It has been shown that D-TACC is necessary for normal spindle function, and the mammalian TACC proteins appears to interact with centrosomes and microtubules in a similar manner.

## REFERENCES

1. Dib, A., et al. 1995. Characterization of the region of the short arm of chromosome 8 amplified in breast carcinoma. *Oncogene* 10: 995-1001.
2. 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.
3. Ugolini, F., et al. 1999. Differential expression assay of chromosome arm 8p genes identifies Frizzled-related (FRP1/FRZB) and Fibroblast Growth Factor Receptor 1 (FGFR1) as candidate breast cancer genes. *Oncogene* 18: 1903-1910.
4. Still, I.H., et al. 1999. Cloning of TACC1, an embryonically expressed, potentially transforming coiled coil containing gene, from the 8p11 breast cancer amplicon. *Oncogene* 18: 4032-4038.
5. Still, I.H., et al. 1999. The third member of the transforming acidic coiled coil-containing gene family, TACC3, maps in 4p16, close to translocation breakpoints in multiple myeloma, and is upregulated in various cancer cell lines. *Genomics* 58: 165-170.

## CHROMOSOMAL LOCATION

Genetic locus: TACC1 (human) mapping to 8p11.22; Tacc1 (mouse) mapping to 8 A2.

## SOURCE

TACC1 (G-18) is an affinity purified goat polyclonal antibody raised against Sa peptide mapping near the N-terminus of TACC1 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.

Blocking peptide available for competition studies, sc-5881 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

TACC1 (G-18) is recommended for detection of TACC1 of mouse, rat and human 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).

TACC1 (G-18) is also recommended for detection of TACC1 in additional species, including equine, canine, bovine and porcine.

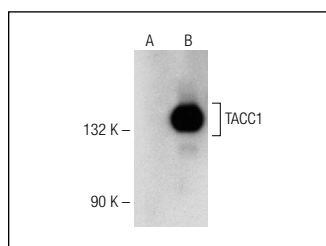
Suitable for use as control antibody for TACC1 siRNA (h): sc-37499, TACC1 siRNA (m): sc-154042, TACC1 shRNA Plasmid (h): sc-37499-SH, TACC1 shRNA Plasmid (m): sc-154042-SH, TACC1 shRNA (h) Lentiviral Particles: sc-37499-V and TACC1 shRNA (m) Lentiviral Particles: sc-154042-V.

Positive Controls: TACC1 (m): 293 Lysate: sc-179572.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TACC1 (G-18): sc-5881. Western blot analysis of TACC1 expression in non transfected: sc-110760 (A) and mouse TACC1 transfected: sc-179572 (B) 293 whole cell lysates.

## STORAGE

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

**MONOS**  
Satisfaction  
Guaranteed

Try **TACC1 (E-3): sc-377373**, our highly recommended monoclonal alternative to TACC1 (G-18).