

TACC3 (E-4): sc-376900

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 and FGFR3 genes on chromosomes 8, 10 and 4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

TACC3 (E-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 45-83 within an internal region of TACC3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376900 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TACC3 (E-4) is recommended for detection of TACC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TACC3 (E-4) is also recommended for detection of TACC3 in additional species, including canine and porcine.

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.

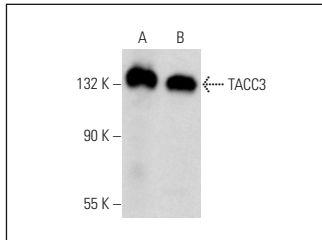
Molecular Weight of TACC3: 140 kDa.

Positive Controls: HT-29 whole cell lysate: sc-364232, A549 cell lysate: sc-2413 or HeLa whole cell lysate: sc-2200.

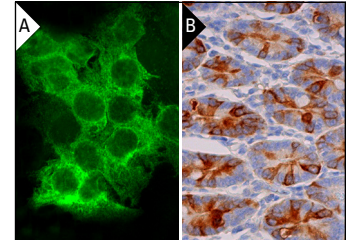
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TACC3 (E-4): sc-376900. Western blot analysis of TACC3 expression in HT-29 (A) and A549 (B) whole cell lysates.



TACC3 (E-4): sc-376900. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Vallejo, A., et al. 2017. An integrative approach unveils FOSL1 as an oncogene vulnerability in KRAS-driven lung and pancreatic cancer. *Nat. Commun.* 8: 14294.
2. Román, M., et al. 2019. Inhibitor of differentiation-1 sustains mutant KRAS-driven progression, maintenance, and metastasis of lung adenocarcinoma via regulation of a FOSL1 network. *Cancer Res.* 79: 625-638.

STORAGE

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

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.