SANTA CRUZ BIOTECHNOLOGY, INC.

TANC2 (S-16): sc-139183

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TANC2 (tetratricopeptide repeat, ankyrin repeat and coiled-coil domain-containing protein 2), also known as rolling pebbles homolog B, is a 1,990 amino acid protein that belongs to the TANC family and exists as 4 alternatively spliced isoforms. TANC2 contains 11 ANK repeats and 3 TPR repeats. The gene that encodes TANC2 contains 418,170 bases and maps to human chromosome 17q23.3. Encoding over 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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3. Varley, J.M., et al. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. Oncogene 14: 865-871.
4. Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. Br. J. Cancer 77: 192-200.
5. Soussi, T., et al. 2000. p53 website and analysis of p53 gene mutations in human cancer: forging a link between epidemiology and carcinogenesis. Hum. Mutat. 15: 105-113.
6. Piura, B., et al. 2001. Three primary malignancies related to BRCA mutation successively occurring in a BRCA1 185delAG mutation carrier. Eur. J. Obstet. Gynecol. Reprod. Biol. 97: 241-244.
7. Minamoto, T., et al. 2001. Distinct pattern of p53 phosphorylation in human tumors. Oncogene 20: 3341-3347.

CHROMOSOMAL LOCATION

Genetic locus: TANC2 (human) mapping to 17q23.2; Tanc2 (mouse) mapping to 11 E1.

SOURCE

TANC2 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TANC2 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-139183 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TANC2 (S-16) is recommended for detection of TANC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with TANC.

Suitable for use as control antibody for TANC2 siRNA (h): sc-156065, TANC2 siRNA (m): sc-154066, TANC2 shRNA Plasmid (h): sc-156065-SH, TANC2 shRNA Plasmid (m): sc-154066-SH, TANC2 shRNA (h) Lentiviral Particles: sc-156065-V and TANC2 shRNA (m) Lentiviral Particles: sc-154066-V.

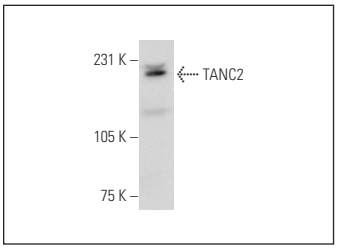
Molecular Weight of TANC2: 220 kDa.

Positive Controls: mouse brain extract: sc-2253.

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) 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



TANC2 (S-16): sc-139183. Western blot analysis of TANC2 expression in mouse brain tissue extract.

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.

MONOS Satisfaction Guaranteed

Try **TANC2 (D-11): sc-515710**, our highly recommended monoclonal alternative to TANC2 (S-16).