SANTA CRUZ BIOTECHNOLOGY, INC.

TANC2 (N-13): sc-139181



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 approximately 418,170 bases and maps to human chromosome 17q23.2. 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 and is specifically 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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- Brill, L.M., et al. 2004. Robust phosphoproteomic profiling of tyrosine phosphorylation sites from human T cells using immobilized metal affinity chromatography and tandem mass spectrometry. Anal. Chem. 76: 2763-2772.
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CHROMOSOMAL LOCATION

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

RESEARCH USE

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

SOURCE

TANC2 (N-13) 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139181 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TANC2 (N-13) 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.

TANC2 (N-13) is also recommended for detection of TANC2 in additional species, including equine, canine and bovine.

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.

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) Immunofluo-rescence: 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.

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.