

# TANC (E-13): sc-139178

## BACKGROUND

TANC (tetratricopeptide repeat, ankyrin repeat and coiled-coil domain-containing protein), also known as TANC1, is a 1,861 amino acid postsynaptic cell membrane protein that contains 11 ANK repeats, 3 TPR repeats and belongs to the TANC family. While it may be a scaffolding component in the postsynaptic density, TANC interacts with TNIK, SAPAP1,  $\alpha$ -interneixin, CaMKII, NMDA $\epsilon$ 2 and GluR-1. It is also thought that TANC interacts directly with SAP 97, PSD-95 and Homer. Upon stimulation by Rap 2, MINK1 and TNIK may phosphorylate TANC. The TANC gene encodes 2 alternatively spliced isoforms, contains 264,025 bases and maps to human chromosome 2q24.2. Making up approximately 8% of the human genome, chromosome 2 consists of 237 million bases and encodes over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2 including Harlequin ichthyosis, sitosterolemia and Alström syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TANC1 (human) mapping to 2q24.2; Tanc1 (mouse) mapping to 2 C1.1.

## SOURCE

TANC (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TANC of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139178 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TANC (E-13) is recommended for detection of TANC 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 TANC2.

TANC (E-13) is also recommended for detection of TANC in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for TANC siRNA (h): sc-94500, TANC siRNA (m): sc-154065, TANC shRNA Plasmid (h): sc-94500-SH, TANC shRNA Plasmid (m): sc-154065-SH, TANC shRNA (h) Lentiviral Particles: sc-94500-V and TANC shRNA (m) Lentiviral Particles: sc-154065-V.

Molecular Weight of TANC isoforms: 202/191 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.