

# TMTC2 (P-14): sc-169652

## BACKGROUND

The tetratricopeptide repeat (TPR) motif is a degenerate, 34 amino acid sequence found in many proteins and acts to mediate protein-protein interactions in various pathways. At the sequence level, there can be up to 16 tandem TPR repeats, each of which has a helix-turn-helix shape that stacks on other TPR repeats to achieve ligand binding specificity. TMTC2 (transmembrane and tetratricopeptide repeat containing 2) is an 836 amino acid multi-pass membrane protein that contains ten TPR repeats and belongs to the TMTC family. The gene encoding TMTC2 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TMTC2 (human) mapping to 12q21.31; Tmtc2 (mouse) mapping to 10 D1.

## RESEARCH USE

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

## SOURCE

TMTC2 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMTC2 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-169652 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMTC2 (P-14) is recommended for detection of TMTC2 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 other TMTC family members.

TMTC2 (P-14) is also recommended for detection of TMTC2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMTC2 siRNA (h): sc-95728, TMTC2 siRNA (m): sc-154533, TMTC2 shRNA Plasmid (h): sc-95728-SH, TMTC2 shRNA Plasmid (m): sc-154533-SH, TMTC2 shRNA (h) Lentiviral Particles: sc-95728-V and TMTC2 shRNA (m) Lentiviral Particles: sc-154533-V.

Molecular Weight of TMTC2: 94 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.