

TMTC4 (Y-19): sc-84645



The Power to Question

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. TMTC4 (transmembrane and tetratricopeptide repeat containing 4) is a 741 amino acid multi-pass membrane protein that contains 8 TPR repeats and is expressed as multiple alternatively spliced isoforms. The gene encoding TMTC4 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TMTC4 (human) mapping to 13q32.3; Tmtc4 (mouse) mapping to 14 E5.

SOURCE

TMTC4 (Y-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TMTC4 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84645 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMTC4 (Y-19) is recommended for detection of TMTC4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TMTC4 (Y-19) is also recommended for detection of TMTC4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMTC4 siRNA (h): sc-76694, TMTC4 siRNA (m): sc-154535, TMTC4 shRNA Plasmid (h): sc-76694-SH, TMTC4 shRNA Plasmid (m): sc-154535-SH, TMTC4 shRNA (h) Lentiviral Particles: sc-76694-V and TMTC4 shRNA (m) Lentiviral Particles: sc-154535-V.

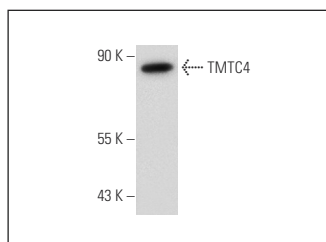
Molecular Weight of TMTC4: 83 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TMTC4 (Y-19): sc-84645. Western blot analysis of TMTC4 expression in mouse brain tissue extract.

RESEARCH USE

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