

TMCO1 (Y-14): sc-241012

BACKGROUND

TMCO1 (transmembrane and coiled-coil domain-containing protein 1), also known as TMCC4 (transmembrane and coiled-coil domains protein 4) or xenogeneic cross-immune protein PCIA3, is a 188 amino acid multi-pass membrane protein that belongs to the TMCO1 family and exists as two alternatively spliced isoforms. While expressed abundantly in thymus, prostate, testis and small intestine, TMCO1 is expressed to a lower extent in brain, placenta, lung and kidney. The gene that encodes TMCO1 contains approximately 44,890 bases and maps to human chromosome 1q24. Comprising nearly 8% of the human genome, chromosome 1 spans 260 million base pairs, contains over 3,000 genes and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: TMCO1 (human) mapping to 1q24.1; Tmco1 (mouse) mapping to 1 H2.3.

SOURCE

TMCO1 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMCO1 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-241012 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMCO1 (Y-14) is recommended for detection of TMCO1 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 TMCO family members.

TMCO1 (Y-14) is also recommended for detection of TMCO1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMCO1 siRNA (h): sc-88439, TMCO1 siRNA (m): sc-154324, TMCO1 shRNA Plasmid (h): sc-88439-SH, TMCO1 shRNA Plasmid (m): sc-154324-SH, TMCO1 shRNA (h) Lentiviral Particles: sc-88439-V and TMCO1 shRNA (m) Lentiviral Particles: sc-154324-V.

Molecular Weight of TMCO1 isoforms: 21/19 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 or our catalog for detailed protocols and support products.