TMEM72 (T-15): sc-249035



The Power to Question

BACKGROUND

TMEM72 (transmembrane protein 72), also known as KSP37 (kidney-specific secretory protein of 37 kDa), is a 275 amino acid multi-pass membrane protein that exists as 2 alternatively spliced isoforms. The gene that encodes TMEM72 consists of approximately 25,803 bases and maps to human chromosome 10q11.21. Spanning nearly 135 million base pairs and encoding nearly 1,200 genes, chromosome 10 makes up approximately 4.5% of the human genome. Several protein-coding genes, including those that encode chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, Cockayne syndrome, multiple endocrine neoplasia type 2 and porphyria. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10.

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CHROMOSOMAL LOCATION

Genetic locus: TMEM72 (human) mapping to 10q11.21; Tmem72 (mouse) mapping to 6 E3.

SOURCE

TMEM72 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMEM72 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-249035 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM72 (T-15) is recommended for detection of TMEM72 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 TMEM family members.

TMEM72 (T-15) is also recommended for detection of TMEM72 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TMEM72 siRNA (h): sc-90503, TMEM72 siRNA (m): sc-141888, TMEM72 shRNA Plasmid (h): sc-90503-SH, TMEM72 shRNA Plasmid (m): sc-141888-SH, TMEM72 shRNA (h) Lentiviral Particles: sc-90503-V and TMEM72 shRNA (m) Lentiviral Particles: sc-141888-V.

Molecular Weight of TMEM72 isoforms: 30/17 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.

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