

TM9SF1 (K-13): sc-132115

BACKGROUND

Transmembrane 9 superfamily member 1 (TM9SF1), also known as MP70 or HMP70, is a 606 amino acid member of the nonaspin (TM9SF) family. A multi-pass membrane protein with nine putative hydrophobic transmembrane domains, TM9SF1 is expressed in lung, pancreas, liver, kidney and placenta. Lower levels of expression can be found in brain, heart and skeletal muscle. TM9SF1 is highly conserved among a variety of species and shares homology with three complete yeast proteins, ten plant proteins and one nematode unidentified protein. Protein conformation and cloning data suggest that TM9SF1 may function as a channel, small molecular transporter or receptor.

REFERENCES

1. Chluba-de Tapia, J., et al. 1997. Cloning of a human multispanning membrane protein cDNA: evidence for a new protein family. *Gene* 197: 195-204.
2. Sugawara, T., et al. 2001. The iodocyanopindolol and SM-11044 binding protein belongs to the TM9SF multispanning membrane protein superfamily. *Gene* 273: 227-237.
3. Schlegel, J., et al. 2004. Serial induction of mutations by ethylnitrosourea in PC12 cells: a new model for a phenotypical characterization of the neurotoxic response to 6-hydroxydopamine. *J. Neurosci. Methods* 137: 215-220.
4. Rødahl, E., et al. 2005. Chromosomal imbalances in some benign orbital tumours. *Acta Ophthalmol. Scand.* 83: 385-391.
5. Papa, F.T., et al. 2008. A 3 Mb deletion in 14q12 causes severe mental retardation, mild facial dysmorphism and Rett-like features. *Am. J. Med. Genet.* A 146: 1994-1998.
6. Romanos, M., et al. 2008. Genome-wide linkage analysis of ADHD using high-density SNP arrays: novel loci at 5q13.1 and 14q12. *Mol. Psychiatry* 13: 522-530.

CHROMOSOMAL LOCATION

Genetic locus: TM9SF1 (human) mapping to 14q12; Tm9sf1 (mouse) mapping to 14 C3.

SOURCE

TM9SF1 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TM9SF1 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-132115 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

TM9SF1 (K-13) is recommended for detection of TM9SF1 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 family members TM9SF2, TM9SF3 or TM9SF4.

TM9SF1 (K-13) is also recommended for detection of TM9SF1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TM9SF1 siRNA (h): sc-92431, TM9SF1 siRNA (m): sc-154310, TM9SF1 shRNA Plasmid (h): sc-92431-SH, TM9SF1 shRNA Plasmid (m): sc-154310-SH, TM9SF1 shRNA (h) Lentiviral Particles: sc-92431-V and TM9SF1 shRNA (m) Lentiviral Particles: sc-154310-V.

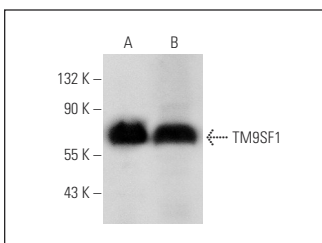
Molecular Weight of TM9SF1: 70 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, human kidney extract: sc-363764 or human skeletal muscle extract: sc-363776.

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.

DATA



TM9SF1 (K-13): sc-132115. Western blot analysis of TM9SF1 expression in human kidney (A) and human skeletal muscle (B) tissue extracts.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.