

TM9SF1 (E-18): sc-102133

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 multispansing membrane protein cDNA: evidence for a new protein family. *Gene* 197: 195-204.
2. Sugasawa, T., et al. 2001. The iodocyanopindolol and SM-11044 binding protein belongs to the TM9SF multispansing 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 dysmorphisms and Rett-like features. *Am. J. Med. Genet. A.* 146A: 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 (E-18) is a purified rabbit polyclonal antibody raised against TM9SF1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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 or our catalog for detailed protocols and support products.

APPLICATIONS

TM9SF1 (E-18) is recommended for detection of TM9SF1 of mouse, human and dog 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

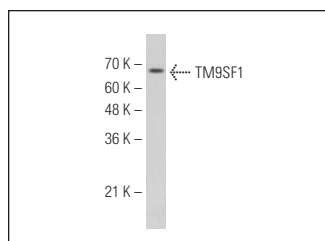
Molecular Weight of TM9SF1: 70 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



TM9SF1 (E-18): sc-102133. Western blot analysis of TM9SF1 expression in Jurkat whole cell lysate.

RESEARCH USE

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