

TM9SF4 (D-17): sc-85962

BACKGROUND

TM9SF4 (transmembrane 9 superfamily member 4), also known as KIAA0255, is a 642 amino acid multi-pass membrane protein that belongs to the non-spanin (TM9SF) family. TM9SF4 is post-translationally phosphorylated at tyrosine 312 and is encoded by a gene that maps to human chromosome 20. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, ring chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought to be important for seminal production and may be potential targets for male contraception.

REFERENCES

1. Nagase, T., et al. 1996. Prediction of the coding sequences of unidentified human genes. VI. The coding sequences of 80 new genes (KIAA0201-KIAA0280) deduced by analysis of cDNA clones from cell line KG-1 and brain. *DNA Res.* 3: 321-329, 341.
2. Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
3. Joó, J.G., et al. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.
4. Fulbright, R.K., et al. 2006. The imaging appearance of Creutzfeldt-Jakob disease caused by the E200K mutation. *Magn Reson Imaging* 24: 1121-1129.
5. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.
6. Robert, M.L., et al. 2007. Alagille syndrome with deletion 20p12.2-p12.3 and hypoplastic left heart. *Clin. Dysmorphol.* 16: 241-246.
7. Elghezal, H., et al. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4--KCNQ2 genes loci. *Eur. J. Med. Genet.* 50: 441-445.
8. O'Rand, M.G., et al. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. *Soc. Reprod. Fertil. Suppl.* 63: 445-453.
9. Zahedi, R.P., et al. 2008. Phosphoproteome of resting human platelets. *J. Proteome Res.* 7: 526-534.

CHROMOSOMAL LOCATION

Genetic locus: TM9SF4 (human) mapping to 20q11.21; Tm9sf4 (mouse) mapping to 2 H1.

SOURCE

TM9SF4 (D-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TM9SF4 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 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-85962 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TM9SF4 (D-17) is recommended for detection of TM9SF4 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); non cross-reactive with TM9SF2.

TM9SF4 (D-17) is also recommended for detection of TM9SF4 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for TM9SF4 siRNA (h): sc-76677, TM9SF4 siRNA (m): sc-154313, TM9SF4 shRNA Plasmid (h): sc-76677-SH, TM9SF4 shRNA Plasmid (m): sc-154313-SH, TM9SF4 shRNA (h) Lentiviral Particles: sc-76677-V and TM9SF4 shRNA (m) Lentiviral Particles: sc-154313-V.

Molecular Weight of TM9SF4: 70 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, NIH/3T3 whole cell lysate: sc-2210 or C32 whole cell lysate: sc-2205.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.