

TM9SF4 (A-3): sc-374473

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

- 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.
- Ville, D., et al. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
- Joó, J.G., et al. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.

CHROMOSOMAL LOCATION

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

SOURCE

TM9SF4 (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 151-181 within an internal region of TM9SF4 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TM9SF4 (A-3) is available conjugated to agarose (sc-374473 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374473 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374473 PE), fluorescein (sc-374473 FITC), Alexa Fluor[®] 488 (sc-374473 AF488), Alexa Fluor[®] 546 (sc-374473 AF546), Alexa Fluor[®] 594 (sc-374473 AF594) or Alexa Fluor[®] 647 (sc-374473 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-374473 AF680) or Alexa Fluor[®] 790 (sc-374473 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374473 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

TM9SF4 (A-3) is recommended for detection of TM9SF4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

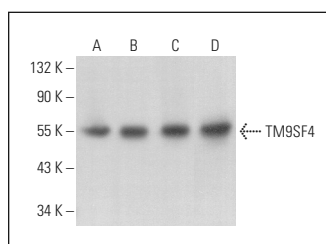
TM9SF4 (A-3) is also recommended for detection of TM9SF4 in additional species, including equine, canine, bovine and porcine.

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.

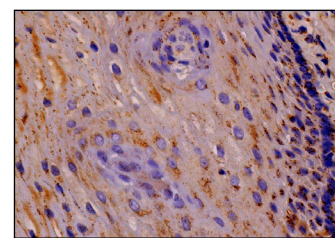
Molecular Weight of TM9SF4: 70 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, A-375 cell lysate: sc-3811 or 3T3-L1 cell lysate: sc-2243.

DATA



TM9SF4 (A-3): sc-374473. Western blot analysis of TM9SF4 expression in A-375 (A), HEL 92.1.7 (B) and 3T3-L1 (C) whole cell lysates and rat testis tissue extract (D).



TM9SF4 (A-3): sc-374473. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of squamous epithelial cells.

SELECT PRODUCT CITATIONS

- Klee, K.M.C., et al. 2023. A CRISPR screen in intestinal epithelial cells identifies novel factors for polarity and apical transport. *Elife* 12: e80135.

RESEARCH USE

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

PROTOCOLS

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

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