

# TMEM179B (M-19): sc-248942

## BACKGROUND

TMEM179B (transmembrane protein 179B) is a 219 amino acid protein that belongs to the TMEM179 family. Considered a multi-pass membrane protein, TMEM179B is integral to the membrane of cells. TMEM179B is encoded by a gene located on human chromosome 11, which often translocates with chromosome 17 possibly contributing to human myeloid leukemia. It has been suggested that the germ-line deletion of chromosome 11p13 is the first of two or more steps to cancer in AGR triad (aniridia, genito-urinary abnormalities and mental retardation) children. Mutations or changes to the short arm of chromosome 11 has been correlated with major affective disorders which are a group of illnesses manifested by disturbances in mood and in physiological, cognitive and endocrine functions, including bipolar affective disorders. The gene encoding the cardiac isoform of myosin binding protein-C has recently been assigned to chromosome 11p11.2 and proposed as a candidate FHC (familial hypertrophic cardiomyopathy) gene.

## REFERENCES

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3. Watkins, H., et al. 1995. Mutations in the cardiac myosin binding protein-C gene on chromosome 11 cause familial hypertrophic cardiomyopathy. *Nat. Genet.* 11: 434-437.
4. Nakamura, T., et al. 1996. Fusion of the nucleoporin gene NUP98 to HOXA9 by the chromosome translocation t(7;11)(p15;p15) in human myeloid leukaemia. *Nat. Genet.* 12: 154-158.
5. Björling, E. and Uhlen, M. 2008. Antibodypedia, a portal for sharing antibody and antigen validation data. *Mol. Cell. Proteomics* 7: 2028-2037.
6. Yilmaz, S., et al. 2010. Investigation of low-dose ritonavir on human peripheral blood mononuclear cells using gene expression whole genome microarrays. *Genomics* 96: 57-65.
7. Herrera, M.B., et al. 2010. Human liver stem cell-derived microvesicles accelerate hepatic regeneration in hepatectomized rats. *J. Cell. Mol. Med.* 14: 1605-1618.
8. SWISS-PROT/TrEMBL (Q7Z7N9). World Wide Web URL: <http://www.uniprot.org/uniprot/Q7Z7N9>

## CHROMOSOMAL LOCATION

Genetic locus: Tmem179b (mouse) mapping to 19 A.

## SOURCE

TMEM179B (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TMEM179B of mouse 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-248942 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TMEM179B (M-19) is recommended for detection of TMEM179B of mouse and rat 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 TMEM179.

Suitable for use as control antibody for TMEM179B siRNA (m): sc-154417, TMEM179B shRNA Plasmid (m): sc-154417-SH and TMEM179B shRNA (m) Lentiviral Particles: sc-154417-V.

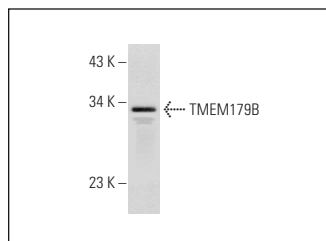
Molecular Weight of TMEM179B: 24 kDa.

Positive Controls: mouse brain extract: sc-2235.

## 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.

## DATA



TMEM179B (M-19): sc-248942. Western blot analysis of TMEM179B expression in mouse brain tissue extract.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.