

TMEM179 (N-14): sc-241050

BACKGROUND

TMEM179 (transmembrane protein 179) is a 233 amino acid protein encoded by a gene mapping to human chromosome 14. Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease. The SERPINA1 gene is located on chromosome 14 and when defective leads to the genetic disorder α 1-antitrypsin deficiency. This disorder is characterized by severe lung complications and liver dysfunction. Notably, the immunoglobulin heavy chain locus is found on chromosome 14 and has been identified as a fusion with the chromosome 19 encoded protein BCL3 in the (14;19) translocations found in a variety of B cell malignancies.

REFERENCES

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5. Albani, D., et al. 2007. Presenilin-1 mutation E318G and familial Alzheimer's disease in the Italian population. *Neurobiol. Aging* 28: 1682-1688.
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CHROMOSOMAL LOCATION

Genetic locus: TMEM179 (human) mapping to 14q32.33; Tmem179 (mouse) mapping to 12 F1.

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.

SOURCE

TMEM179 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TMEM179 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241050 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM179 (N-14) is recommended for detection of TMEM179 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 other TMEM family members.

TMEM179 (N-14) is also recommended for detection of TMEM179 in additional species, including equine, bovine and avian.

Suitable for use as control antibody for TMEM179 siRNA (h): sc-92362, TMEM179 siRNA (m): sc-154416, TMEM179 shRNA Plasmid (h): sc-92362-SH, TMEM179 shRNA Plasmid (m): sc-154416-SH, TMEM179 shRNA (h) Lentiviral Particles: sc-92362-V and TMEM179 shRNA (m) Lentiviral Particles: sc-154416-V.

Molecular Weight of TMEM179 isoform 1/2: 26/22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

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.

PROTOCOLS

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