BACKGROUND

TMEM63C (transmembrane protein 63C) is an 806 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 α1-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


CHROMOSOMAL LOCATION

Genetic locus: TMEM63C (human) mapping to 14q24.3; Tmem63c (mouse) mapping to 12 D2.

SOURCE

TMEM63C (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TMEM63C 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-249033 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM63C (D-19) is recommended for detection of TMEM63C 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 TMEM63A or TMEM63B.

TMEM63C (D-19) is also recommended for detection of TMEM63C in additional species, including canine and bovine.

Suitable for use as control antibody for TMEM63C siRNA (h): sc-92272, TMEM63C siRNA (m): sc-154489, TMEM63C shRNA Plasmid (h): sc-92272-SH, TMEM63C shRNA Plasmid (m): sc-154489-SH, TMEM63C shRNA (h) Lentiviral Particles: sc-92272-V and TMEM63C shRNA (m) Lentiviral Particles: sc-154489-V.

Molecular Weight of TMEM63C: 93 kDa.

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.

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.