

TMEM183 (Q-16): sc-103281

BACKGROUND

TMEM183 (transmembrane protein 183), also known as Tmem183a or MNCb-2755, is a 375 amino acid membrane protein that belongs to the TMEM183 family. The gene that encodes TMEM183 maps to murine chromosome 1. Mouse chromosome 1 houses over 1,500 genes, some of which encode proteins such as nuclear receptor coactivators, coatmer complex subunits, synaptotagmins and olfactory receptors. In mice, chromosome 1 is the site of several recombination hotspots, indicating that chromosome 1 may play an important role in genetic diversity. Defects in chromosome 1-localized genes are associated with a variety of conditions, including autoimmune myocarditis, lymphocyte cell death, catalepsy, infantile neuroaxonal dystrophy and lung carcinomas.

REFERENCES

1. Kelmenson, P.M., et al. 2005. A torrid zone on mouse chromosome 1 containing a cluster of recombinational hotspots. *Genetics* 169: 833-841.
2. Matsushima, Y., et al. 2005. A new mouse model for infantile neuroaxonal dystrophy, inad mouse, maps to mouse chromosome 1. *Mamm. Genome* 16: 73-78.
3. Hollander, M.C., et al. 2005. Deletion of XPC leads to lung tumors in mice and is associated with early events in human lung carcinogenesis. *Proc. Natl. Acad. Sci. USA* 102: 13200-13205.
4. Katayama, S., et al. 2005. sense transcription in the mammalian transcriptome. *Science* 309: 1564-1566.
5. Hofstetter, J.R., et al. 2008. Characterization of the quantitative trait locus for haloperidol-induced catalepsy on distal mouse chromosome 1. *Genes Brain Behav.* 7: 214-223.
6. Paigen, K., et al. 2008. The recombinational anatomy of a mouse chromosome. *PLoS Genet.* 4: e1000119.

CHROMOSOMAL LOCATION

Genetic locus: TMEM183A (human) mapping to 1q32.1, TMEM183B (human) mapping to 3q25.1; Tmem183a (mouse) mapping to 1 E4.

SOURCE

TMEM183 (Q-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TMEM183A of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103281 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TMEM183 (Q-16) is recommended for detection of TMEM183A and TMEM183B of human origin and TMEM183 of mouse and rat origin 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 other TMEM family members.

TMEM183 (Q-16) is also recommended for detection of TMEM183A and TMEM183B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TMEM183 siRNA (h): sc-270155, TMEM183 siRNA (m): sc-154421, TMEM183 shRNA Plasmid (h): sc-270155-SH, TMEM183 shRNA Plasmid (m): sc-154421-SH, TMEM183 shRNA (h) Lentiviral Particles: sc-270155-V and TMEM183 shRNA (m) Lentiviral Particles: sc-154421-V.

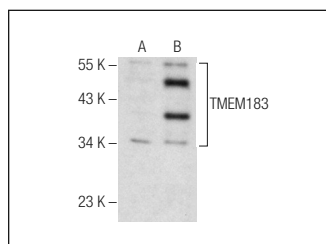
Molecular Weight of TMEM183: 43 kDa.

Positive Controls: TMEM183 (m): 293T Lysate: sc-124139.

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



TMEM183 (Q-16): sc-103281. Western blot analysis of TMEM183 expression in non-transfected: sc-117752 (A) and mouse TMEM183 transfected: sc-124139 (B) 293T whole cell lysates.

RESEARCH USE

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