SANTA CRUZ BIOTECHNOLOGY, INC.

TMEM154 (V-14): sc-139190

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TMEM154 is a 128 amino acid protein encoded by a gene mapping to human chromosome 4. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Notably, the Huntingtin gene, which is found to encode an expanded glutamine tract in cases of Huntington's disease, is on chromosome 4. FGFR-3 is also encoded on chromosome 4 and has been associated with thanatophoric dwarfism, achondroplasia, Muenke syndrome and bladder cancer. Chromosome 4 is also tied to Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease. Chromosome 4 reportedly contains the largest gene deserts (regions of the genome with no protein encoding genes) and has one of the two lowest recombination frequencies of the human chromosomes.

CHROMOSOMAL LOCATION

Genetic locus: TMEM154 (human) mapping to 4q31.3; Tmem154 (mouse) mapping to 3 F1.

SOURCE

TMEM154 (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMEM154 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-139190 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

TMEM154 (V-14) is recommended for detection of TMEM154 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TMEM family members.

TMEM154 (V-14) is also recommended for detection of TMEM154 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TMEM154 siRNA (h): sc-88911, TMEM154 siRNA (m): sc-154386, TMEM154 shRNA Plasmid (h): sc-88911-SH, TMEM154 shRNA Plasmid (m): sc-154386-SH, TMEM154 shRNA (h) Lentiviral Particles: sc-88911-V and TMEM154 shRNA (m) Lentiviral Particles: sc-154386-V.

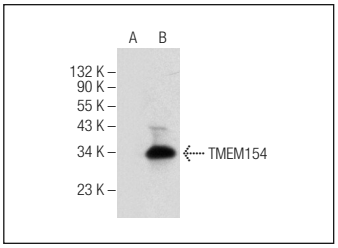
Molecular Weight of TMEM154: 20 kDa.

Positive Controls: TMEM154 (m): 293T Lysate: sc-124125, human liver tissue extract or human testis tissue extract.

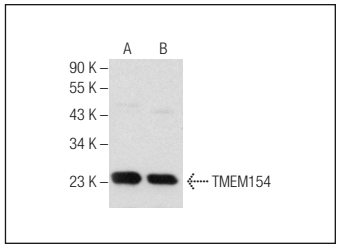
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TMEM154 (V-14): sc-139190. Western blot analysis of TMEM154 expression in non-transfected: sc-117752 (**A**) and mouse TMEM154 transfected: sc-124125 (**B**) 293T whole cell lysates.



TMEM154 (V-14): sc-139190. Western blot analysis of TMEM154 expression in human liver (**A**) and human testis (**B**) tissue extracts.

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.

MONOS Satisfaction Guaranteed

Try **TMEM154 (H-11): sc-398802** or **TMEM154 (F-8): sc-398803**, our highly recommended monoclonal alternatives to TMEM154 (V-14).