

TMEM154 (H-11): sc-398802

BACKGROUND

TMEM154 is a 128 amino acid protein encoded by a gene mapping to human chromosome 4q31.3. Representing approximately 6% of the human genome, chromosome 4 contains nearly 900 genes. Notably, the Huntington 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.

REFERENCES

- Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
- Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. *Curr. Top. Dev. Biol.* 75: 25-71.
- Chandler, R.J., et al. 2007. Metabolic phenotype of methylmalonic acidemia in mice and humans: the role of skeletal muscle. *BMC Med. Genet.* 8: 64.
- de Frutos, C.A., et al. 2007. Snail1 is a transcriptional effector of FGFR-3 signaling during chondrogenesis and achondroplasias. *Dev. Cell* 13: 872-883.

CHROMOSOMAL LOCATION

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

SOURCE

TMEM154 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 124-145 within a cytoplasmic domain of TMEM154 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TMEM154 (H-11) is available conjugated to agarose (sc-398802 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398802 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398802 PE), fluorescein (sc-398802 FITC), Alexa Fluor® 488 (sc-398802 AF488), Alexa Fluor® 546 (sc-398802 AF546), Alexa Fluor® 594 (sc-398802 AF594) or Alexa Fluor® 647 (sc-398802 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398802 AF680) or Alexa Fluor® 790 (sc-398802 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398802 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

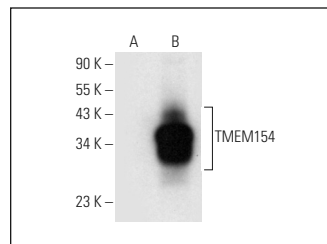
TMEM154 (H-11) is recommended for detection of TMEM154 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

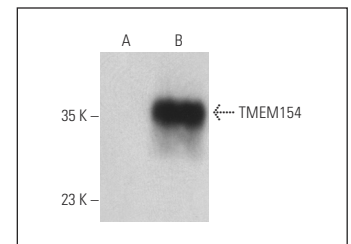
Molecular Weight of TMEM154: 20 kDa.

Positive Controls: TMEM154 (m): 293T Lysate: sc-124125.

DATA



TMEM154 (H-11): sc-398802. Western blot analysis of TMEM154 expression in non-transfected: sc-117752 (A) and mouse TMEM154 transfected: sc-124125 (B) 293T whole cell lysates.



TMEM154 (H-11) HRP: sc-398802 HRP. Direct western blot analysis of TMEM154 expression in non-transfected: sc-117752 (A) and mouse TMEM154 transfected: sc-124125 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Watts, J.M., et al. 2017. A case of AML characterized by a novel t(4;15)(q31;q22) translocation that confers a growth-stimulatory response to retinoid-based therapy. *Int. J. Mol. Sci.* 18: 1492.

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.

PROTOCOLS

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