SANTA CRUZ BIOTECHNOLOGY, INC.

TMEM129 (T-14): sc-244350

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TMEM129 is a 362 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.

REFERENCES

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3. 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
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5. de Frutos, C.A., et al. 2007. Snail1 is a transcriptional effector of FGFR3 signaling during chondrogenesis and achondroplasias. Dev. Cell 13: 872-883.
6. Versteegh, F.G., et al. 2007. EvC Working Party. Growth hormone analysis and treatment in Ellis-van Creveld syndrome. Am. J. Med. Genet. A 143: 2113-2121.
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8. Ruiz-Perez, V.L., et al. 2007. Evc is a positive mediator of Ihh-regulated bone growth that localises at the base of chondrocyte cilia. Development 134: 2903-2912.
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CHROMOSOMAL LOCATION

Genetic locus: TMEM129 (human) mapping to 4p16.3; Tmem129 (mouse) mapping to 5 B2.

SOURCE

TMEM129 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TMEM129 of human origin.

RESEARCH USE

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

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-244350 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM129 (T-14) is recommended for detection of TMEM129 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.

TMEM129 (T-14) is also recommended for detection of TMEM129 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TMEM129 siRNA (h): sc-89025, TMEM129 siRNA (m): sc-154361, TMEM129 shRNA Plasmid (h): sc-89025-SH, TMEM129 shRNA Plasmid (m): sc-154361-SH, TMEM129 shRNA (h) Lentiviral Particles: sc-89025-V and TMEM129 shRNA (m) Lentiviral Particles: sc-154361-V.

Molecular Weight of TMEM129 isoform 1/2: 40/26 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.

STORAGE

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

PROTOCOLS

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