

TMEM174 (N-14): sc-244379

BACKGROUND

TMEM174 (transmembrane protein 174) is a 243 amino acid protein encoded by a gene mapping to human chromosome 5. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. It is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: TMEM174 (human) mapping to 5q13.2; Tmem174 (mouse) mapping to 13 D1.

RESEARCH USE

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

SOURCE

TMEM174 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TMEM174 of human origin.

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-244379 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM174 (N-14) is recommended for detection of TMEM174 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.

TMEM174 (N-14) is also recommended for detection of TMEM174 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TMEM174 siRNA (h): sc-91960, TMEM174 siRNA (m): sc-154412, TMEM174 shRNA Plasmid (h): sc-91960-SH, TMEM174 shRNA Plasmid (m): sc-154412-SH, TMEM174 shRNA (h) Lentiviral Particles: sc-91960-V and TMEM174 shRNA (m) Lentiviral Particles: sc-154412-V.

Molecular Weight of TMEM174 isoforms 1/2: 26/23 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.