

TMEM167B (P-16): sc-248924

BACKGROUND

TMEM167B, also known as Protein kish-B and C1orf119, is a 74 amino acid single-pass type-I membrane protein that is localized to the golgi apparatus membrane and functions in the early part of the secretory pathway. The gene encoding TMEM167B maps to human chromosome 1, the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

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CHROMOSOMAL LOCATION

Genetic locus: TMEM167B (human) mapping to 1p13.3; Tmem167b (mouse) mapping to 3 F3.

RESEARCH USE

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

SOURCE

TMEM167B (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TMEM167B 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-248924 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM167B (P-16) is recommended for detection of TMEM167B 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).

TMEM167B (P-16) is also recommended for detection of TMEM167B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TMEM167B siRNA (h): sc-88119, TMEM167B siRNA (m): sc-154397, TMEM167B shRNA Plasmid (h): sc-88119-SH, TMEM167B shRNA Plasmid (m): sc-154397-SH, TMEM167B shRNA (h) Lentiviral Particles: sc-88119-V and TMEM167B shRNA (m) Lentiviral Particles: sc-154397-V.

Molecular Weight of TMEM167B: 8 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.