



TMEM55A (A-14): sc-87457

BACKGROUND

TMEM55A (transmembrane protein 55A) is a 257 amino acid multi-pass membrane protein that localizes to both the lysosomal and the late endosomal membranes. Expressed ubiquitously, TMEM55A functions to catalyze the H₂O-dependent hydrolysis of the 4-position phosphate of phosphatidylinositol 4,5-bisphosphate, thereby playing a crucial role in the degradation of phosphatidylinositol-4,5-bisphosphate. The gene encoding TMEM55A maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: TMEM55A (human) mapping to 8q21.3; Tmem55a (mouse) mapping to 4 A1.

SOURCE

TMEM55A (A-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TMEM55A 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-87457 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TMEM55A (A-14) is recommended for detection of TMEM55A 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).

Suitable for use as control antibody for TMEM55A siRNA (h): sc-77757, TMEM55A siRNA (m): sc-154479, TMEM55A shRNA Plasmid (h): sc-77757-SH, TMEM55A shRNA Plasmid (m): sc-154479-SH, TMEM55A shRNA (h) Lentiviral Particles: sc-77757-V and TMEM55A shRNA (m) Lentiviral Particles: sc-154479-V.

Molecular Weight of TMEM55A: 28 kDa.

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) 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.

RESEARCH USE

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