

# TMEM38A (S-13): sc-241718

## BACKGROUND

TMEM38A (transmembrane protein 38A), also known as TRICA (trimeric intracellular cation channel type A), is a 299 amino acid multi-pass membrane protein that belongs to the TMEM38 family and exists as a homotrimer. The second transmembrane domain within TMEM38A has been proposed to cross only half of the lipid bilayer and to loop back into the cytosol. This results in the regions on each side of this domain to localize to the cytosolic face of the membrane. The cytosolic loop may form an ion-conducting pore. While it may act as a potassium counter-ion channel that functions in synchronization with calcium release from intracellular stores, TMEM38A is known to be a monovalent cation channel that is required for maintenance of rapid intracellular calcium release. The gene that encodes TMEM38A consists of approximately 27,893 bases and maps to human chromosome 19p13.11.

## CHROMOSOMAL LOCATION

Genetic locus: TMEM38A (human) mapping to 19p13.11; Tmem38a (mouse) mapping to 8 B3.3.

## SOURCE

TMEM38A (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TMEM38A 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-241718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

TMEM38A (S-13) is recommended for detection of TMEM38A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with TMEM38B.

TMEM38A (S-13) is also recommended for detection of TMEM38A in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TMEM38A siRNA (h): sc-97105, TMEM38A siRNA (m): sc-154461, TMEM38A shRNA Plasmid (h): sc-97105-SH, TMEM38A shRNA Plasmid (m): sc-154461-SH, TMEM38A shRNA (h) Lentiviral Particles: sc-97105-V and TMEM38A shRNA (m) Lentiviral Particles: sc-154461-V.

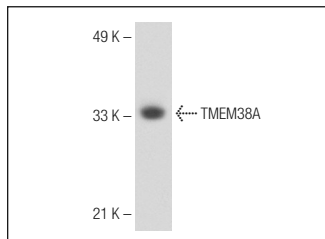
Molecular Weight of TMEM38A: 33 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



TMEM38A (S-13): sc-241718. Western blot analysis of TMEM38A expression in rat skeletal muscle tissue extract.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **TMEM38A (G-12): sc-390054**, our highly recommended monoclonal alternative to TMEM38A (S-13).