SANTA CRUZ BIOTECHNOLOGY, INC.

TRPM6 (S-18): sc-79795

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Transient receptor potential ion channels (TRPC) are a superfamily of six transmembrane segment-spanning gated cation channels. TRP subtypes mediate store-operated Ca^{2+} entry, a process involving Ca^{2+} influx and replenishment of Ca^{2+} stores formerly emptied through the action of inositol 1,4,5-trisphosphate production and other Ca^{2+} mobilizing agents. TRP ion channels influence calcium-depletion-induced calcium influx processes in response to chemo-, mechano- and osmo-regulatory events. TRPM6 (transient receptor potential cation channel, subfamily M, member 6), also known as HSH, HMGX, HOMG, CHAK2 or HOMG1, is a 2,022 amino acid multi-pass membrane protein that is highly expressed in kidney and colon. An essential ion channel and a serine/threonine-protein kinase, TRPM6 is crucial for magnesium homeostasis and has an important role in epithelial magnesium transport and in the active magnesium absorption in the gut and kidney.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TRPM6 (human) mapping to 9q21.13; Trpm6 (mouse) mapping to 19 B.

SOURCE

TRPM6 (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal cytoplasmic domain of TRPM6 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-79795 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRPM6 (S-18) is recommended for detection of TRPM6 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).

TRPM6 (S-18) is also recommended for detection of TRPM6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRPM6 siRNA (h): sc-76754, TRPM6 siRNA (m): sc-76755, TRPM6 shRNA Plasmid (h): sc-76754-SH, TRPM6 shRNA Plasmid (m): sc-76755-SH, TRPM6 shRNA (h) Lentiviral Particles: sc-76754-V and TRPM6 shRNA (m) Lentiviral Particles: sc-76755-V.

Molecular Weight of TRPM6: 234 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.

RESEARCH USE

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