

TRPM8 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2715a

Specification

TRPM8 Antibody (internal region) - Product Information

Application

Primary Accession <u>Q7Z2W7</u>

Other Accession NP_076985.4, 79054, 171382 (mouse), 171384

<u>(rat)</u>

Predicted Human, Mouse, Rat

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG

Calculated MW 127685

TRPM8 Antibody (internal region) - Additional Information

Gene ID 79054

Other Names

Transient receptor potential cation channel subfamily M member 8, Long transient receptor potential channel 6, LTrpC-6, LTrpC6, Transient receptor potential p8, Trp-p8, TRPM8, LTRPC6, TRPP8

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TRPM8 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPM8 Antibody (internal region) - Protein Information

Name TRPM8

Synonyms LTRPC6, TRPP8

Function

Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation.



Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage- dependent activation curves. The chemical agonist menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. In prostate cancer cells, shows strong inward rectification and high calcium selectivity in contrast to its behavior in normal cells which is characterized by outward rectification and poor cationic selectivity. Plays a role in prostate cancer cell migration (PubMed:25559186). Isoform 2 and isoform 3 negatively regulate menthol- and cold-induced channel activity by stabilizing the closed state of the channel.

Cellular Location

Cell membrane; Multi-pass membrane protein. Membrane raft. Endoplasmic reticulum membrane. Note=Localizes to membrane rafts but is also located in the cell membrane outside of these regions where channel response to cold is enhanced compared to membrane rafts (By similarity). Located in the endoplasmic reticulum in prostate cancer cells.

Tissue Location

Expressed in prostate. Also expressed in prostate tumors and in non-prostatic primary tumors such as colon, lung, breast and skin tumors.

TRPM8 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRPM8 Antibody (internal region) - Images

TRPM8 Antibody (internal region) - References

TRPM8 is required for cold sensation in mice. Dhaka A, Murray AN, Mathur J, Earley TJ, Petrus MJ, Patapoutian A. Neuron. 2007 May 3;54(3):371-8. PMID: 17481391