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TRPM8 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8181b

Specification

TRPM8 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q7Z2W7

TRPM8 Antibody (C-term) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8181b was selected from the C-term region of human TRPM8. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TRPM8 Antibody (C-term) Blocking Peptide - 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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TRPM8 Antibody (C-term) Blocking Peptide - Images

TRPM8 Antibody (C-term) Blocking Peptide - Background

TRPM8 is a receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. It is activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH and involved in menthol sensation. It is permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium.

TRPM8 Antibody (C-term) Blocking Peptide - References

Tsavaler L.,Cancer Res. 61:3760-3769(2001).Kiessling A.,Prostate 56:270-279(2003).Bodding,M.,Cell Calcium 42 (6), 618-628 (2007)