

TRPM8 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8181B

Specification

TRPM8 Antibody (C-term) - Product Information

Application WB, IHC-P,E **Primary Accession** 07Z2W7 O8R455 Other Accession Reactivity Human Predicted Rat Host Rabbit **Polyclonal** Clonality Isotype Rabbit IgG Calculated MW 127685 Antigen Region 1075-1104

TRPM8 Antibody (C-term) - 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

This TRPM8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1075-1104 amino acids from the C-terminal region of human TRPM8.

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions

TRPM8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPM8 Antibody (C-term) - 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.

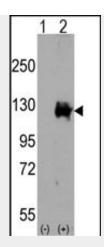
TRPM8 Antibody (C-term) - Protocols

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

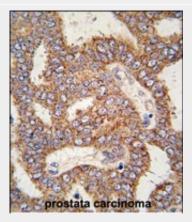
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TRPM8 Antibody (C-term) - Images





Western blot analysis of TRPM8 (arrow) using rabbit polyclonal TRPM8 Antibody (C-term)(Cat.#AP8181b).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the TRPM8 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with TRPM8 antibody (C-term) (Cat.#AP8181b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

TRPM8 Antibody (C-term) - 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) - 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)