

TRPM8 Antibody (C-term C940)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8181D

Specification

TRPM8 Antibody (C-term C940) - Product Information

Application	WB, IHC-P,E
Primary Accession	<u>Q7Z2W7</u>
Other Accession	<u>Q8R4D5</u>
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	926-956

TRPM8 Antibody (C-term C940) - 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 926-956 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 C940) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPM8 Antibody (C-term C940) - 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.

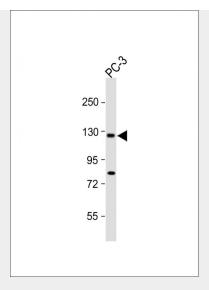
TRPM8 Antibody (C-term C940) - Protocols

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

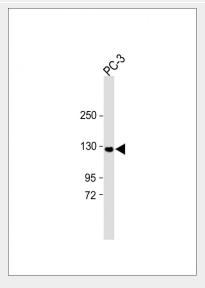
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TRPM8 Antibody (C-term C940) - Images



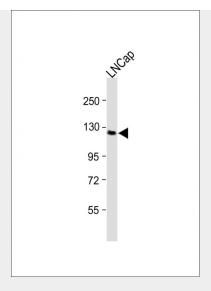


All lanes : Anti-TRPM8 Antibody (C-term C940) at 1:1000 dilution Lane 1: PC-3 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 125kDa Blocking/Dilution buffer: 5% NFDM/TBST.

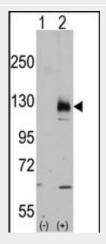


All lanes : Anti-TRPM8 Antibody (C-term C940) at 1:1000 dilution Lane 1: PC-3 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 128kDa Blocking/Dilution buffer: 5% NFDM/TBST.

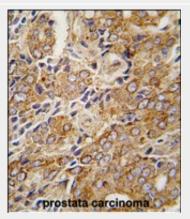




All lanes : Anti-TRPM8 Antibody (C-term C940) at 1:500 dilution Lane 1: LNCap whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 125kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of TRPM8 (arrow) using rabbit polyclonal TRPM8 Antibody (C-term C940)(Cat.#AP8181d).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 C940) (Cat.#AP8181d), 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 C940) - 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 C940) - 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)