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Anti-TRPM8 Picoband Antibody

Catalog # ABO12523

Specification

Anti-TRPM8 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	Q7Z2W7
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Transient receptor potential cation channel subfamily M member 8(TRPM8) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TRPM8 Picoband Antibody - 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

Calculated MW
127685 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane; Multi-pass membrane protein. Membrane raft. Endoplasmic reticulum membrane. 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 Specificity
Expressed in prostate. Also expressed in prostate tumors and in non-prostatic primary tumors such as colon, lung, breast and skin tumors. .

Protein Name
Transient receptor potential cation channel subfamily M member 8

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human TRPM8 (1068-1104aa NTKANDTSEEMRHRFRQLDTKLNDLKGLLKEIANKIK), different from the related mouse sequence by four amino acids, and from the related rat sequence by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-TRPM8 Picoband Antibody - Protein Information

Name TRPM8

Synonyms LTRPC6, TRPP8

Function
Non-selective ion channel permeable to monovalent and divalent cations, including Na(+), K(+), and Ca(2+), with higher permeability for Ca(2+). Activated by multiple factors, such as temperature, voltage, pressure, and changes in osmolality. Activated by cool temperatures (<23-28 degrees Celsius) and by chemical ligands evoking a sensation of coolness, such as menthol and icilin therefore plays a central role in the detection of environmental cold temperatures (PubMed:15306801, PubMed:15852009, PubMed:16174775, PubMed:25559186, PubMed:37857704). TRPM8 is a voltage-dependent channel; its activation by cold or chemical ligands shifts its voltage thresholds towards physiological membrane potentials, leading to the opening of the channel (PubMed:15306801). In addition to its critical role in temperature sensing, regulates basal tear secretion by sensing evaporation-induced cooling and changes in osmolality (By similarity). May plays a role in prostate cancer cell migration (PubMed:16174775, PubMed:25559186).

Cellular Location
Cell membrane; Multi-pass membrane protein. Membrane raft {ECO:0000250|UniProtKB:Q8R4D5}. Endoplasmic reticulum membrane. Note=Lipid raft association modulates TRPM8 channel activity (By similarity) Located in the endoplasmic reticulum in prostate cancer cells (PubMed:11325849, PubMed:16174775). {ECO:0000250|UniProtKB:Q8R4D5, ECO:0000269|PubMed:11325849, ECO:0000269|PubMed:16174775}

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

Anti-TRPM8 Picoband Antibody - Protocols

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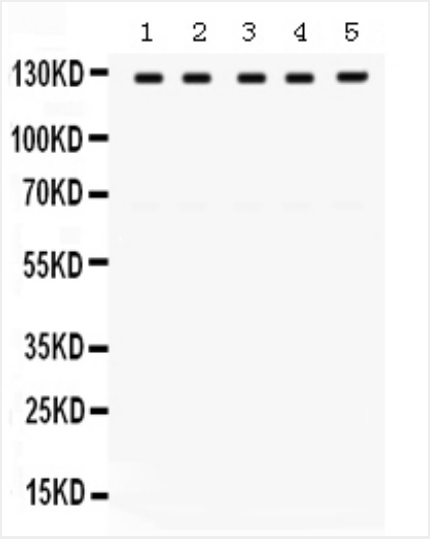
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TRPM8 Picoband Antibody - Images



Anti- TRPM8 Picoband antibody, ABO12523, Western blottingAll lanes: Anti TRPM8 (ABO12523) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: 22RV1 Whole Cell Lysate at 40ugLane 3: SW620 Whole Cell Lysate at 40ugLane 4: A549 Whole Cell Lysate at 40ugLane 5: A431 Whole Cell Lysate at 40ugPredicted bind size: 127KDObserved bind size: 127KD

Anti-TRPM8 Picoband Antibody - Background

Transient receptor potential cation channel subfamily M member 8 (TRPM8), also known as the cold and menthol receptor 1 (CMR1), is a protein that in humans is encoded by the TRPM8 gene. TRPM8 is an ion channel, upon activation it allows the entry of Na+ (sodium) and Ca2+ (calcium) ions to the cell that leads to depolarization and the generation of an action potential. The signal is conducted from primary afferents (type C- and A-delta) eventually leading to the sensation of cold and cold pain. The TRPM8 protein is expressed in sensory neurons, and it is activated by cold temperatures and cooling agents, such as menthol and icilin whereas WS-12 and CPS-369 are the most selective agonist of TRPM8.