

Anti-TRPM8 Picoband Antibody
Catalog # ABO12523**Specification****Anti-TRPM8 Picoband Antibody - Product Information**

Application	WB
Primary Accession	O7Z2W7
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 Na₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TRPM8 (1068-1104aa NTKANDTSEEMRHRFRQLDTKLNLDLKGLLKEIANKIK), 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 reconstitution, 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 play 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

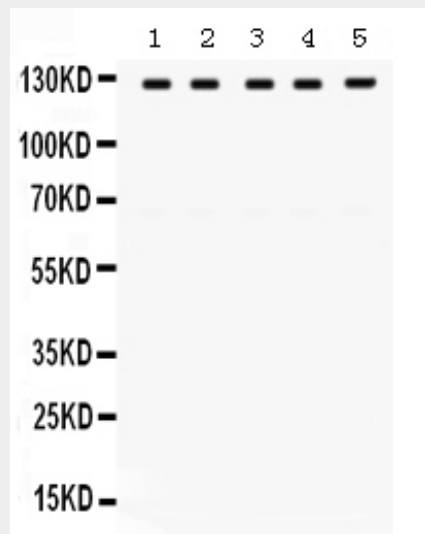
Expressed in prostate. Also expressed in prostate tumors and in non-prostatic primary tumors such as colon, lung, breast and skin tumors.

Anti-TRPM8 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TRPM8 Picoband Antibody - Images



Anti- TRPM8 Picoband antibody, ABO12523, Western blotting All lanes: Anti TRPM8 (ABO12523) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: 22RV1 Whole Cell Lysate at 40ug
Lane 3: SW620 Whole Cell Lysate at 40ug
Lane 4: A549 Whole Cell Lysate at 40ug
Lane 5: A431 Whole Cell Lysate at 40ug
Predicted bind size: 127KD
Observed 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.