

**TRPM8 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11668a****Specification**

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**TRPM8 Antibody (N-term) Blocking peptide - Product Information**Primary Accession [Q7Z2W7](#)**TRPM8 Antibody (N-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

**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 (N-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:<a href="http://www.uniprot.org/citations/25559186" target="\_blank">25559186</a>). 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 (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**TRPM8 Antibody (N-term) Blocking peptide - Images****TRPM8 Antibody (N-term) Blocking peptide - Background**

Phosphatidylcholine (PC)-specific phospholipases D (PLDs; EC 3.1.4.4) catalyze the hydrolysis of PC to produce phosphatidic acid and choline. A range of agonists acting through Gprotein-coupled receptors and receptor tyrosine kinases stimulate this hydrolysis. PC-specific PLD activity has been implicated in numerous cellular pathways, including signal transduction, membrane trafficking, and the regulation of mitosis (Hammond et al., 1995[PubMed 8530346]).

**TRPM8 Antibody (N-term) Blocking peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Kang, D.W., et al. Cancer Res. 70(10):4233-4242(2010) Yin, H., et al. J. Biol. Chem. 285(18):13580-13588(2010) Kang, D.W., et al. PLoS ONE 5 (8), E12109 (2010) :