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TRPM3 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP9707a

Specification

TRPM3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9HCF6

TRPM3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 80036

Other Names
Transient receptor potential cation channel subfamily M member 3, Long transient receptor potential channel 3, LTrpC-3, LTrpC3, Melastatin-2, MLSN2, TRPM3, KIAA1616, LTRPC3

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.

TRPM3 Antibody (N-term) Blocking Peptide - Protein Information

Name TRPM3 (HGNC:17992)

Synonyms KIAA1616, LTRPC3

Function
Constitutively active, non-selective divalent cation- conducting channel that is permeable to Ca(2+), Mn(2+), and Mg(2+), with a high permeability for Ca(2+). However, can be enhanced by increasing temperature and by ligands, including the endogenous neurosteroid pregnenolone sulfate and sphingosine-1 and suppressed by intracellular Mg(2+) (PubMed:12672799, PubMed:12672827, PubMed:32343227). Implicated in a variety of cellular processes, including insulin/peptide secretion, vascular constriction and dilation, noxious heat sensing, inflammatory and spontaneous pain sensitivity. In neurons of the dorsal root ganglia, functions as thermosensitive channel for the detection of noxious heat and spontaneous pain. Suggested to function as an ionotropic steroid receptor in beta-cell, indeed pregnenolone sulfate leads to Ca(2+) influx and enhanced insulin secretion. Mediates Zn(2+) uptake into the lumen of pancreatic beta cell secretory granules, thereby regulating insulin secretion (By similarity). Forms heteromultimeric ion channels with TRPM1 which are permeable for Ca(2+) and Zn(2+) ions (PubMed:<a href="http://www.uniprot.org/citations/21278253"

target="_blank">21278253). Exists as multiple splice variants which differ significantly in their biophysical properties (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:J9SQF3}

Tissue Location
Expressed primarily in the kidney and, at lower levels, in brain, testis, ovary, pancreas and spinal cord. Expression in the brain and kidney was determined at protein level. In the kidney, expressed predominantly in the collecting tubular epithelium in the medulla, medullary rays, and periglomerular regions; in the brain, highest levels are found in the cerebellum, choroid plexus, the locus coeruleus, the posterior thalamus and the substantia nigra. Down- regulated in renal tumors compared to normal kidney. Expressed in the lens (PubMed:25090642).

TRPM3 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TRPM3 Antibody (N-term) Blocking Peptide - Images

TRPM3 Antibody (N-term) Blocking Peptide - Background

Calcium channel mediating constitutive calcium ion entry. Its activity is increased by reduction in extracellular osmolarity, by store depletion and muscarinic receptor activation.

TRPM3 Antibody (N-term) Blocking Peptide - References

Nagase T., et.al., DNA Res. 7:273-281(2000).Lee N., Chen J., et.al., J. Biol. Chem. 278:20890-20897(2003).