

MRGPRX2 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP16522b

Specification

MRGPRX2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q96LB1</u>

MRGPRX2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 117194

Other Names Mas-related G-protein coupled receptor member X2, MRGPRX2, MRGX2

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.

MRGPRX2 Antibody (C-term) Blocking Peptide - Protein Information

Name MRGPRX2

Synonyms MRGX2

Function

Mast cell-specific receptor for basic secretagogues, i.e. cationic amphiphilic drugs, as well as endoor exogenous peptides, consisting of a basic head group and a hydrophobic core (PubMed:25517090). Recognizes and binds small molecules containing a cyclized tetrahydroisoquinoline (THIQ), such as non-steroidal neuromuscular blocking drugs (NMBDs), including tubocurarine and atracurium. In response to these compounds, mediates pseudo-allergic reactions characterized by histamine release, inflammation and airway contraction (By similarity). Acts as a receptor for a number of other ligands, including peptides and alkaloids, such as cortistatin-14, proadrenomedullin N-terminal peptides PAMP-12 and, at lower extent, PAMP-20, antibacterial protein LL-37, PMX-53 peptide, beta-defensins, and complanadine A.

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Mainly expressed in mast cells. Has a limited expression profile, both peripheral and within the



central nervous system, with highest levels in dorsal root ganglion (PubMed:12915402) Detected in blood vessels, scattered lymphocytes, and gastrointestinal ganglia (at protein level) (PubMed:16161007)

MRGPRX2 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

MRGPRX2 Antibody (C-term) Blocking Peptide - Images

MRGPRX2 Antibody (C-term) Blocking Peptide - Background

MRGPRX2 is the orphan receptor. Probably involved in the function of nociceptive neurons. May regulate nociceptor function and/or development, including the sensation or modulation of pain. Cortistatin-14 seems to be a high potency ligand at this receptor. Cortistatin has several biological functions including roles in sleep regulation locomotor activity, and cortical function. In receptor-expressing cells, cortistatin-stimulated increases in intracellular Ca(2+) but had no effect on basal or forskolin-stimulated cAMP levels, suggesting that this receptor is G(q)-coupled.

MRGPRX2 Antibody (C-term) Blocking Peptide - References

Gembardt, F., et al. Mol. Cell. Biochem. 319 (1-2), 115-123 (2008) :Yang, S., et al. Gene 352, 30-35 (2005) :Robas, N., et al. J. Biol. Chem. 278(45):44400-44404(2003)Takeda, S., et al. FEBS Lett. 520 (1-3), 97-101 (2002) :Dong, X., et al. Cell 106(5):619-632(2001)