

P2RX4 Blocking Peptide (C-term)

Synthetic peptide

Catalog # BP12490b

Specification

P2RX4 Blocking Peptide (C-term) - Product Information

Primary Accession

[O99571](#)

Other Accession

[NP_002551.2](#)**P2RX4 Blocking Peptide (C-term) - Additional Information**

Gene ID 5025

Other Names

P2X purinoceptor 4, P2X4, ATP receptor, Purinergic receptor, P2RX4

Target/Specificity

The synthetic peptide sequence is selected from aa 273-287 of HUMAN P2RX4

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.

P2RX4 Blocking Peptide (C-term) - Protein Information

Name P2RX4

Function

ATP-gated nonselective transmembrane cation channel permeable to potassium, sodium and calcium (PubMed: [9016352](http://www.uniprot.org/citations/9016352)). Activated by extracellularly released ATP, it plays multiple role in immunity and central nervous system physiology (PubMed: [35165166](http://www.uniprot.org/citations/35165166)). Plays a key role in initial steps of T-cell activation and Ca(2+) microdomain formation (By similarity). Participates also in basal T-cell activity without TCR/CD3 stimulation (By similarity). Promotes the differentiation and activation of Th17 cells via expression of retinoic acid-related orphan receptor C/RORC (PubMed: [35165166](http://www.uniprot.org/citations/35165166)). Upon activation, drives microglia motility via the PI3K/Akt pathway (By similarity). Could also function as an ATP-gated cation channel of lysosomal membranes (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein

P2RX4 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

P2RX4 Blocking Peptide (C-term) - Images

P2RX4 Blocking Peptide (C-term) - Background

The product of this gene belongs to the family of purinoceptors for ATP. This receptor functions as a ligand-gated ion channel with high calcium permeability. The main pharmacological distinction between the members of the purinoceptor family is the relative sensitivity to the antagonists suramin and PPADS. The product of this gene has the lowest sensitivity for these antagonists. Multiple alternatively spliced transcript variants have been identified for this gene although their full-length natures have not been determined.

P2RX4 Blocking Peptide (C-term) - References

Allsopp, R.C., et al. J. Biol. Chem. 285(43):32770-32777(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Wareham, K., et al. Br. J. Pharmacol. 157(7):1215-1224(2009)
Varma, R., et al. Neuromolecular Med. 11(2):63-75(2009)