

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP8052b**Specification**

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Product Information

Primary Accession [O96QT4](#)
Other Accession [O9BXB2](#)

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 54822

Other Names

Transient receptor potential cation channel subfamily M member 7, Channel-kinase 1, Long transient receptor potential channel 7, LTrpC-7, LTrpC7, TRPM7, CHAK1, LTRPC7

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8052b](/product/products/AP8052b) was selected from the C-term region of human CHAK1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Protein Information

Name TRPM7

Synonyms CHAK1, LTRPC7

Function

Essential ion channel and serine/threonine-protein kinase. Divalent cation channel permeable to calcium and magnesium (PubMed: <http://www.uniprot.org/citations/35561741> target="_blank">35561741). Has a central role in magnesium ion homeostasis and in the regulation of anoxic neuronal cell death. Involved in TNF- induced necroptosis downstream of MLKL by mediating calcium influx. The kinase activity is essential for the channel function. May be involved in a fundamental process that adjusts plasma membrane divalent cation fluxes according to the metabolic state of the cell. Phosphorylates annexin A1 (ANXA1).

Cellular Location

Membrane; Multi-pass membrane protein

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Images**TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - Background**

TRPCs, mammalian homologs of the *Drosophila* transient receptor potential (trp) protein, are ion channels that are thought to mediate capacitative calcium entry into the cell. TRP-PLIK is a protein that is both an ion channel and a kinase. As a channel, it conducts calcium and monovalent cations to depolarize cells and increase intracellular calcium. As a kinase, it is capable of phosphorylating itself and other substrates. The kinase activity is necessary for channel function, as shown by its dependence on intracellular ATP and by the kinase mutants.[supplied by OMIM]

TRPM7 (CHAK1) Antibody (C-term) Blocking peptide - References

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Oncogene 2000. 19: 5548. Van der Ven, P, et al. *Hum. Molec. Genet.* 1993. 2: 1889. Vanhaesebroeck,
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