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TRPM6 (CHAK2) Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP8053c

Specification

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Product Information

Primary Accession Q9BX84

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Additional Information

Gene ID 140803

Other Names
Transient receptor potential cation channel subfamily M member 6, Channel kinase 2, Melastatin-related TRP cation channel 6, TRPM6, CHAK2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8053c was selected from the Center region of human CHAK2 . 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.

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Protein Information

Name TRPM6

Synonyms CHAK2

Function
Essential ion channel and serine/threonine-protein kinase. Crucial for magnesium homeostasis. Has an important role in epithelial magnesium transport and in the active magnesium absorption in the gut and kidney. Isoforms of the type M6-kinase lack the ion channel region.

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Highly expressed in kidney and colon. Isoform TRPM6a and isoform TRPM6b, are coexpressed with

TRPM7 in kidney, and testis, and are also found in several cell lines of lung origin Isoform TRPM6c is detected only in testis and in NCI-H510A small cell lung carcinoma cells

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Images

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

TRPM6 (CHAK2) Antibody (Center) Blocking peptide - References

Blume-Jensen P, et al. Nature 2001. 411: 355.Cantrell D, J. Cell Sci. 2001. 114: 1439.Jhiang S Oncogene 2000. 19: 5590.Manning G, et al. Science 2002. 298: 1912.Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.Robertson, S. et al. Trends Genet. 2000. 16: 368.Robinson D, et al. Oncogene 2000. 19: 5548.Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889.Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561.Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.