

TRPM6 (CHAK2) Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8053c

Specification

TRPM6 (CHAK2) Antibody (Center) - Product Information

Application WB, IHC-P,E **Primary Accession** O9BX84 Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 231708 **Antigen Region** 317-348

TRPM6 (CHAK2) Antibody (Center) - 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

This TRPM6 (CHAK2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-348 amino acids from the Central region of human TRPM6 (CHAK2).

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TRPM6 (CHAK2) Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPM6 (CHAK2) Antibody (Center) - 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

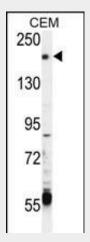
Highly expressed in kidney and colon. Isoform TRPM6a and isoform TRPM6b, are coexpressed with TRPM7 in kidney, and testis, and are also found in several cell lines of lung origin Isoform TRPM6c is detected only in testis and in NCI-H510A small cell lung carcinoma cells

TRPM6 (CHAK2) Antibody (Center) - Protocols

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

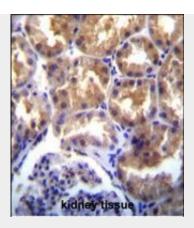
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TRPM6 (CHAK2) Antibody (Center) - Images



CHAK2 Antibody (H332) (Cat. #AP8053c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the CHAK2 antibody detected the CHAK2 protein (arrow).





TRPM6(CHAK2) Antibody (Center) (Cat. #AP8053c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TRPM6 Antibody (CHAK2) (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

TRPM6 (CHAK2) Antibody (Center) - Background

CHAK2 is a member of the ion channel proteins. It regulates the calcium concentration in cells, which is imperative for such functions as muscle contractions and neuronal firing. It is also upregulated in certain forms of cancer and could play a role in diabetes.

TRPM6 (CHAK2) Antibody (Center) - 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.

TRPM6 (CHAK2) Antibody (Center) - Citations

- Up-Regulation of Transient Receptor Potential Melastatin 6 Channel Expression by Tumor Necrosis Factor-α in the Presence of Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor.
- Down-regulation of TRPM6-mediated magnesium influx by cyclosporin A.
- TRPM6 expression and cell proliferation are up-regulated by phosphorylation of ERK1/2 in renal epithelial cells.