

PKD2L1 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP16416a

Specification

PKD2L1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9P0L9</u>

PKD2L1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9033

Other Names Polycystic kidney disease 2-like 1 protein, Polycystin-2 homolog, Polycystin-2L1, Polycystin-L, Polycystin-L1, PKD2L1, PKD2L, PKDL, TRPP3

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.

PKD2L1 Antibody (N-term) Blocking Peptide - Protein Information

Name PKD2L1

Function

Pore-forming subunit of a heterotetrameric, non-selective cation channel that is permeable to Ca(2+) (PubMed: 10517637, PubMed:11959145, PubMed:25820328, PubMed:27754867, PubMed:29425510, PubMed:23212381, PubMed:30004384). Pore-forming subunit of a calcium- permeant ion channel formed by PKD1L2 and PKD1L1 in primary cilia, where it controls cilium calcium concentration, but does not affect cytoplasmic calcium concentration (PubMed:24336289). The channel formed by PKD1L2 and PKD1L1 in primary cilia regulates sonic hedgehog/SHH signaling and GLI2 transcription (PubMed: 24336289). Pore-forming subunit of a channel formed by PKD1L2 and PKD1L3 that contributes to sour taste perception in gustatory cells (PubMed:19812697). The



heteromeric channel formed by PKD1L2 and PKD1L3 is activated by low pH, but opens only when the extracellular pH rises again (PubMed:23212381). May play a role in the perception of carbonation taste (By similarity). May play a role in the sensory perception of water, via a mechanism that activates the channel in response to dilution of salivary bicarbonate and changes in salivary pH (By similarity).

Cellular Location

Cell projection, cilium membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle {ECO:0000250|UniProtKB:A2A259}. Note=Interaction with PKD1 or PKD1L3 is required for localization to the cell membrane {ECO:0000250|UniProtKB:A2A259}

Tissue Location

Detected in taste bud cells in fungiform papillae (at protein level) (PubMed:19812697). Ubiquitous (PubMed:9748274) Expressed in adult heart, skeletal muscle, brain, spleen, testis, retina and liver (PubMed:9748274, PubMed:9878261). Isoform 4 appears to be expressed only in transformed lymphoblasts

PKD2L1 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

PKD2L1 Antibody (N-term) Blocking Peptide - Images

PKD2L1 Antibody (N-term) Blocking Peptide - Background

PKD2L1 is a member of the polycystin proteinfamily. The encoded protein contains multiple transmembranedomains, and cytoplasmic N- and C-termini. The protein may be anintegral membrane protein involved in cell-cell/matrixinteractions. This protein functions as a calcium-regulatednonselective cation channel. Alternative splice variants have beendescribed but their full length sequences have not been determined.

PKD2L1 Antibody (N-term) Blocking Peptide - References

Molland, K.L., et al. Biochem. J. 429(1):171-183(2010)Kawaguchi, H., et al. J. Biol. Chem. 285(23):17277-17281(2010)Li, Q., et al. J. Neurochem. 103(6):2391-2400(2007)Geng, L., et al. J. Cell. Sci. 119 (PT 7), 1383-1395 (2006) :Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)