

Catalog # Al10819

KCNK10 antibody - C-terminal region Rabbit Polyclonal Antibody

Specification

KCNK10 antibody - C-terminal region - Product Information

Application Primary Accession Other Accession Reactivity

Predicted

Host Clonality Calculated MW WB <u>P57789</u> <u>NM_021161</u>, <u>NP_066984</u> Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Dog Human, Mouse, Rabbit, Pig, Chicken, Bovine Rabbit Polyclonal 59kDa KDa

KCNK10 antibody - C-terminal region - Additional Information

Gene ID 54207

Alias Symbol TREK2, TREK-2, K2p10.1 Other Names Potassium channel subfamily K member 10, Outward rectifying potassium channel protein TREK-2, TREK-2 K(+) channel subunit, KCNK10, TREK2

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-KCNK10 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions KCNK10 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

KCNK10 antibody - C-terminal region - Protein Information

Name KCNK10 {ECO:0000303|PubMed:25766236, ECO:0000312|HGNC:HGNC:6273}

Function

K(+) channel that conducts voltage-dependent outward rectifying currents upon membrane depolarization. Voltage sensing is coupled to K(+) electrochemical gradient in an 'ion flux gating' mode where outward but not inward ion flow opens the gate. Converts to voltage-independent 'leak' conductance mode upon stimulation by various stimuli including mechanical membrane stretch, acidic pH, heat and lipids (PubMed:10880510, PubMed:<a href="http://www.uniprot.org/citations/25766236"



target="_blank">25766236, PubMed:26919430, PubMed:38605031). Homo- and heterodimerizes to form functional channels with distinct regulatory and gating properties (PubMed:30573346). In trigeminal ganglia sensory neurons, the heterodimer of KCNK10/TREK-2 and KCNK18/TRESK inhibits neuronal firing and neurogenic inflammation by stabilizing the resting membrane potential at K(+) equilibrium potential as well as by regulating the threshold of action potentials and the spike frequency (By similarity). Permeable to other monovalent ions such as Rb(+) and Cs(+) (PubMed:26919430).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8BUW1}; Multi-pass membrane protein

Tissue Location

[Isoform A]: Abundantly expressed in pancreas and kidney and to a lower level in brain, testis, colon, and small intestine. In brain, mainly expressed in cerebellum, occipital lobe, putamen, and thalamus. No expression is detected in amygdala and spinal cord. [Isoform C]: Abundantly expressed in brain.

KCNK10 antibody - C-terminal region - Protocols

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

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

KCNK10 antibody - C-terminal region - Images

87 kDa	
70 kDa	
60 kDa	
48 kDa	
36 kDa	
21 kDa	

WB Suggested Anti-KCNK10 Antibody Titration: 2.5µg/ml ELISA Titer: 1:62500 Positive Control: Jurkat cell lysate

KCNK10 antibody - C-terminal region - References

Gu,W., et al., (2002) J. Physiol. (Lond.) 539 (PT 3), 657-668Reconstitution and Storage:For short



term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.