

KCNK10 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al10828

Specification

KCNK10 antibody - N-terminal region - Product Information

Application WB
Primary Accession P57789

Other Accession NM 021161, NP 066984

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish, Pig,

Horse, Bovine, Dog

Predicted Human, Mouse, Rabbit, Zebrafish, Pig,

Chicken, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 59kDa KDa

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

KCNK10 antibody - N-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

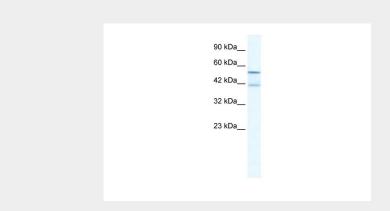
[Isoform A]: Abundantly expressed in pancreas and kidney and to a lower level in brain, testis, colon, and small intestine. In brain, mainly expressed in cerebellum, occipital lobe, putamen, and thalamus. No expression is detected in amygdala and spinal cord. [Isoform C]: Abundantly expressed in brain.

KCNK10 antibody - N-terminal region - Protocols

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

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

KCNK10 antibody - N-terminal region - Images



WB Suggested Anti-KCNK10 Antibody Titration: 2.5µg/ml

ELISA Titer: 1:12500

Positive Control: HepG2 cell lysate

KCNK10 antibody - N-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.