

KCNK13 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56457

Specification

KCNK13 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rost
Clonality
Calculated MW
Rose
Robit
Polyclonal
A5 KDa

Calculated MW 45 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human KCNK13

Epitope Specificity 1-100/408

Isotype Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane.

SIMILARITY Belongs to the two pore domain potassium

channel (TC 1.A.1.8) family.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

affinity purified by Protein A

Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. This gene encodes a potassium channel containing two pore-forming domains. This protein is an open channel that can be stimulated by arachidonic acid and inhibited by the anesthetic halothane. [provided by RefSeq, Jul 2013]

KCNK13 Polyclonal Antibody - Additional Information

Gene ID 56659

Other Names

Potassium channel subfamily K member 13, Tandem pore domain halothane-inhibited potassium channel 1. THIK-1. KCNK13

Dilution

WB~~1:1000/>span class

="dilution_IHC-P">IHC-P~~N/A<br \><span class

="dilution_IHC-F">IHC-F~~N/A<br \><span class

="dilution_IF">IF~~1:50~200<br \> < span class = "dilution_ICC">ICC~~N/A < br \> < span class = "dilution_ICC">ICC~~N/A < span class = "dilution_ICC">ICC~~N/A < span class = "dilution_ICC">ICC~



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\>E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

KCNK13 Polyclonal Antibody - Protein Information

Name KCNK13 {ECO:0000303|PubMed:24163367, ECO:0000312|HGNC:HGNC:6275}

Function

K(+) channel that conducts outward rectifying tonic currents potentiated by purinergic signals (PubMed:24163367, PubMed:25148687, PubMed:30472253, PubMed:38409076). Homo- and heterodimerizes to form functional channels with distinct regulatory and gating properties (PubMed:25148687). Contributes most of K(+) currents at the plasma membrane of resting microglia. Maintains a depolarized membrane potential required for proper ramified microglia morphology and phagocytosis, selectively mediating microglial pruning of presynaptic compartments at hippocampal excitatory synapses (PubMed:38409076). Upon local release of ATP caused by neuronal injury or infection, it is potentiated by P2RY12 and P2RX7 receptor signaling and contributes to ATP-triggered K(+) efflux underlying microglial NLRP3 inflammasome assembly and IL1B release (By similarity) (PubMed:38409076).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in microglia (at protein level).

KCNK13 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KCNK13 Polyclonal Antibody - Images