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KCNK13 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56457

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9HB14
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45391
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCNK13
Epitope Specificity	1-100/408
Isotype	IgG
Purity	affinity purified by Protein A
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	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]

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=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

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).