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KCNH3 Rabbit pAb

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Catalog # AP56452

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9ULD8
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	117129
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCNH3
Epitope Specificity	331-430/1083
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; Multipass membrane protein.
SIMILARITY	Contains 1 cyclic nucleotide-binding domain. Contains 1 PAC (PAS-associated C-terminal) domain. Contains 1 PAS (PER-ARNT-SIM) domain.
SUBUNIT	The potassium channel is probably composed of a homo- or heterotetrameric complex of pore-forming alpha subunits that can associate with modulating beta subunits.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Voltage gated potassium (Kv) 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. KCNH3 is a pore forming (alpha) subunit of voltage-gated potassium channel. It elicits an outward current with fast inactivation.

Additional Information

Gene ID	23416
Other Names	Voltage-gated inwardly rectifying potassium channel KCNH3, Brain-specific eag-like channel 1, BEC1, Ether-a-go-go-like potassium channel 2, ELK channel 2, ELK2, Potassium voltage-gated channel subfamily H member 3, Voltage-gated potassium channel subunit Kv12.2, KCNH3 (HGNC:6252), KIAA1282
Target/Specificity	Detected only in brain, in particular in the telencephalon. Detected in the cerebral cortex, occipital pole, frontal and temporal lobe, putamen, amygdala, hippocampus and caudate nucleus.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
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	KCNH3 (HGNC:6252)
Synonyms	KIAA1282
Function	Pore-forming (alpha) subunit of a voltage-gated inwardly rectifying potassium channel (PubMed:10455180). Charactherized by a fast rate of activation during depolarization followed by a rapid inactivation at much more depolarized value causing inward rectification due to a C-type inactivation mechanism (PubMed:10455180). Exhibits a rapid recovery from inactivation (PubMed:10455180).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q9WVJ0}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9WVJ0} Note=Expression on the cell membrane requires at least one of the three glycosylation sites to carry a sugar chain irrespective of their positions. {ECO:0000250|UniProtKB:Q9WVJ0}
Tissue Location	Detected only in brain, in particular in the telencephalon (PubMed:10455180). Detected in the cerebral cortex, occipital pole, frontal and temporal lobe, putamen, amygdala, hippocampus and caudate nucleus (PubMed:10455180)

Background

Voltage gated potassium (Kv) 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. KCNH3 is a pore forming (alpha) subunit of voltage-gated potassium channel. It elicits an outward current with fast inactivation.