

KCNH3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56452

Product Information

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

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW
Physical State

Q9ULD8
Rat
Polyclonal
Table
Polyclonal
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 Potassium voltage-gated channel subfamily H member 3, Brain-specific

eag-like channel 1, BEC1, Ether-a-go-go-like potassium channel 2, ELK channel 2, ELK2, Voltage-gated potassium channel subunit Kv12.2, KCNH3, 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=1:100-500,IF=1:100-500

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 KCNH3 (HGNC:6252)

Synonyms KIAA1282

Function Pore-forming (alpha) subunit of a voltage-gated inwardly rectifying

potassium channel (PubMed:<u>10455180</u>). 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:<u>10455180</u>). Exhibits a rapid recovery from

inactivation (PubMed: 10455180).

Cellular Location Cell membrane {ECO:0000250 | UniProtKB:Q9WV]0}; 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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.