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KCNG3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4954a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8TAE7
Other Accession	Q8R523, P59053
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25547
Calculated MW	49593
Antigen Region	6-34

Additional Information

Gene ID	170850
Other Names	Potassium voltage-gated channel subfamily G member 3, Voltage-gated potassium channel subunit Kv101, Voltage-gated potassium channel subunit Kv63, KCNG3
Target/Specificity	This KCNG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-34 amino acids from the N-terminal region of human KCNG3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KCNG3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KCNG3 (HGNC:18306)
Function	Regulatory subunit of the voltage-gated potassium (Kv) channel which,

	when coassembled with KCNB1, modulates the kinetics parameters of the heterotetrameric channel namely the inactivation and deactivation rate (PubMed:11852086, PubMed:12060745, PubMed:19074135). Potassium channel subunit that does not form functional channels by itself (PubMed:11852086, PubMed:12060745). Reduces the deactivation rate (PubMed:11852086). Moderately accelerates activation (PubMed:12060745).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cytoplasm. Note=Has to be associated with KCNB1 or possibly another partner to get inserted in the plasma membrane (PubMed:12060745). Colocalizes with KCNB1 at the plasma membrane (PubMed:12060745, PubMed:19074135). Retains in the endoplasmic reticulum in the absence of KCNB1 (PubMed:12060745)
Tissue Location	Expressed in the brain, liver, testis, small intestine, colon, thymus and adrenal gland (PubMed:11852086, PubMed:12060745).

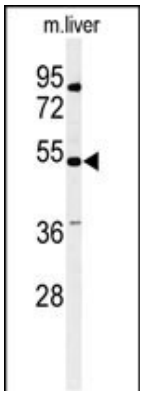
Background

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. This gene encodes a member of the potassium channel, voltage-gated, subfamily G. This member is a gamma subunit functioning as a modulatory molecule.

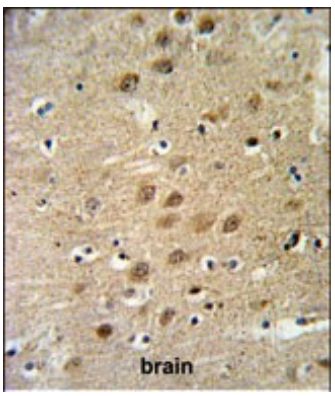
References

Mederos Y Schnitzler, M., et al. J. Biol. Chem. 284(7):4695-4704(2009)
Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005)
Vega-Saenz de Miera, E.C. Brain Res. Mol. Brain Res. 123 (1-2), 91-103 (2004)

Images



Western blot analysis of KCNG3 Antibody (N-term) (Cat. #AP4954a) in mouse liver tissue lysates (35ug/lane). KCNG3 (arrow) was detected using the purified Pab.



KCNG3 Antibody (N-term) (Cat. #AP4954a) IHC analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KCNG3 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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