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KCNG3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4954a

Specification

KCNG3 Antibody (N-term) - Product Information

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

KCNG3 Antibody (N-term) - 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
IHC-P~~1:50~100
WB~~1:1000
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.

KCNG3 Antibody (N-term) - Protein Information

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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)

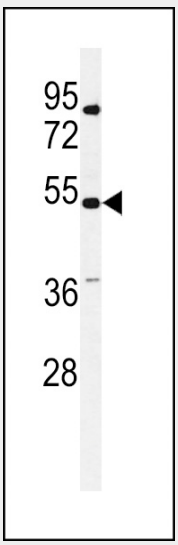
Tissue Location
Expressed in the brain, liver, testis, small intestine, colon, thymus and adrenal gland (PubMed:11852086, PubMed:12060745).

KCNG3 Antibody (N-term) - 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

KCNG3 Antibody (N-term) - 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.

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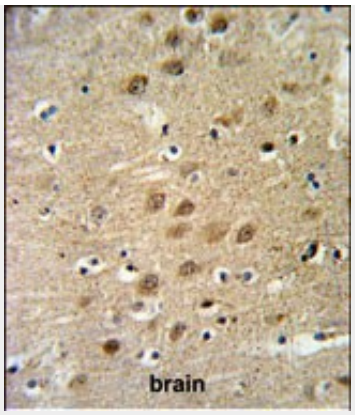

KCNG3 Antibody (N-term) (Cat. #AP4954a) IHC analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KCNG3 Antibody (N-term) for immunohistochemistry. Clinical relevance has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

KCNG3 Antibody (N-term) - 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.

KCNG3 Antibody (N-term) - 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)