Product Name: **Kv4.2 (phospho Ser616) Rabbit Polyclonal Antibody**
Catalog #: **APRab04933**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	

Antigen Information

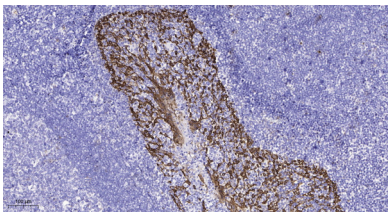
Gene Name	KCND2
Alternative Names	KCND2; KIAA1044; Potassium voltage-gated channel subfamily D member 2; Voltage-gated potassium channel subunit Kv4.2
Gene ID	3751.0
SwissProt ID	Q9NZV8
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human Kv4.2 (phospho Ser616)

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. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in Drosophila, and each has been shown to have human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shal-related subfamily, members of which form voltage-activated A-type potassium ion channels and are prominent in the repolarization phase of the action potential. This member mediates a rapidly inactivating, A-type outward potassium current which is not under the control of the N terminus as idomain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.,function:Pore-forming (alpha) subunit of voltage-gated rapidly inactivating A-type potassium channels. May contribute to I(To) current in heart and I(Sa) current in neurons. Channel properties are modulated by interactions with other alpha subunits and with regulatory subunits.,PTM:Phosphorylated on serine and threonine residues.,similarity:Belongs to the potassium channel family. D (Shal) subfamily.,subcellular location:Detected in dendrites in cultured hippocampal neurons. Association with KCNIP2 probably enhances cell surface expression.,subunit:Homotetramer or heterotetramer with KCND1 and/or KCND3. Interacts with DPP6, DLG4 and FREQ (By similarity). Interacts with DLG1. Associates with the regulatory subunits KCNIP1, KCNIP2, KCNIP3 and KCNIP4. Probably part of a complex consisting of KCNIP1, KCNIP2 isoform 3 and KCND2. The KCND2-KCNIP2 channel complex contains four KCND2 and four KCNIP2 subunits. Interacts with FLNA, FLNC and DPP10.,tissue specificity:Highly expressed throughout the brain. Expression is very low or absent in other tissues.,

Research Area

Image Data



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200（4° overnight）. 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200（room temperature, 45min）.