
Product Name: Kv1.3 (phospho Tyr187) Rabbit Polyclonal Antibody**Catalog #: APRab04929**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,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	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight	58kDa

Antigen Information

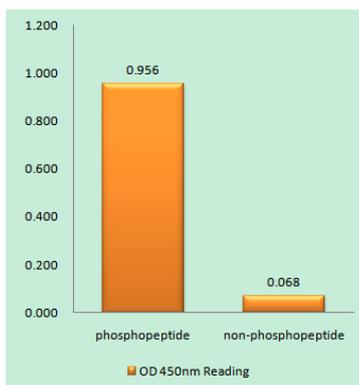
Gene Name	KCNA3
Alternative Names	KCNA3; HGK5; Potassium voltage-gated channel subfamily A member 3; HGK5; HLK3; HPCN3; Voltage-gated K(+) channel HuKIII; Voltage-gated potassium channel subunit Kv1.3
Gene ID	3738.0
SwissProt ID	P22001
Immunogen	The antiserum was produced against synthesized peptide derived from human Kv1.3/KCNA3 around the phosphorylation site of Tyr135. AA range:101-150

Background

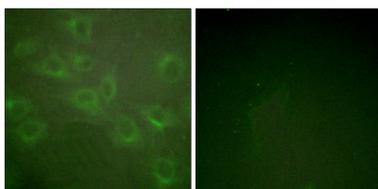
Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle 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, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, members of which allow nerve cells to efficiently repolarize following an action potential. It plays an essential role in T-cell proliferation and caution: It is uncertain whether Met-1 or Met-53 is the initiator., domain: The N-terminus may be important in determining the rate of inactivation of the channel while the tail may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments., domain: The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position., function: Mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient., sequence caution: Translation N-terminally extended., similarity: Belongs to the potassium channel family. A (Shaker) subfamily., subunit: Heterotetramer of potassium channel proteins. Binds PDZ domains of DLG1, DLG2 and DLG4.,

Research Area

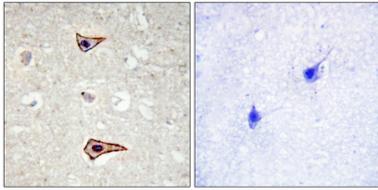
Image Data



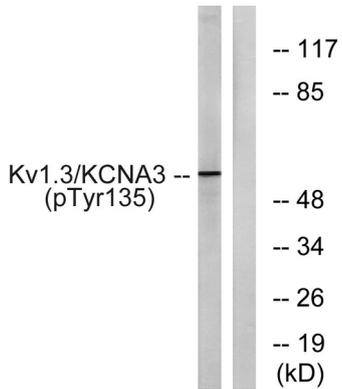
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right) , using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody



Immunofluorescence analysis of HUVEC cells, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with starved 24h, using Kv1.3/KCNA3 (Phospho-Tyr135) Antibody. The lane on the right is blocked with the phospho peptide.