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KCNC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14545b

Product Information

Application	WB, IHC-P, E
Primary Accession	P48547
Other Accession	P15388, NP_004967.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34483
Calculated MW	57942
Antigen Region	479-508

Additional Information

Gene ID	3746
Other Names	Potassium voltage-gated channel subfamily C member 1, NGK2, Voltage-gated potassium channel subunit Kv31, Voltage-gated potassium channel subunit Kv4, KCNC1
Target/Specificity	This KCNC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 479-508 amino acids from the C-terminal region of human KCNC1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	KCNC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KCNC1 {ECO:0000303|PubMed:8449507, ECO:0000312|HGNC:HGNC:6233}
Function	Voltage-gated potassium channel that opens in response to the voltage

	difference across the membrane and through which potassium ions pass in accordance with their electrochemical gradient (PubMed:25401298, PubMed:35840580). The mechanism is time-dependent and inactivation is slow (By similarity). Plays an important role in the rapid repolarization of fast-firing brain neurons (By similarity). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well (By similarity). Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P25122}. Presynaptic cell membrane {ECO:0000250|UniProtKB:P25122}. Note=Localizes in parallel fiber membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones. {ECO:0000250|UniProtKB:P25122}

Background

The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to one of these subfamilies, namely the Shaw subfamily. The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes. Multiple transcript variants encoding different isoforms have been inferred for this gene based on orthologous loci.

References

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