

KCNF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17981c

Product Information

Application	WB, E
Primary Accession	Q9H3M0
Other Accession	NP_002227.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38277
Calculated MW	55584
Antigen Region	195-221

Additional Information

Gene ID	3754
Other Names	Potassium voltage-gated channel subfamily F member 1, Voltage-gated potassium channel subunit Kv51, KH1, KCNF1
Target/Specificity	This KCNF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 195-221 amino acids from the Central region of human KCNF1.
Dilution	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	KCNF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KCNF1 (HGNC:6246)
Function	Regulatory alpha-subunit of the voltage-gated potassium (Kv) channel which, when coassembled with KCNB1 or KCNB2, can modulate their expression and their gating kinetics by acting on deactivation upon

repolarization and inactivation during maintained depolarization. Accelerates inactivation but has relatively little effect on deactivation. Coexpression with KCNB1 or KCNB2 markedly slows inactivation. Each modulatory subunit has its own specific properties of regulation, and can lead to extensive inhibitions, to large changes in kinetics, and/or to large shifts in the voltage dependencies of the inactivation process. The gating kinetics depends on the nature and stoichiometry of the associated regulatory subunit. Fails to produce a potassium current when expressed alone.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q14721}; Multi-pass membrane protein

Tissue Location

Detected in heart, brain, liver, skeletal muscle, kidney and pancreas

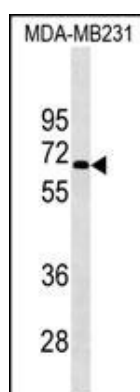
Background

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 F. This gene is intronless and expressed in all tissues tested, including the heart, skeletal muscle, brain, kidney, and pancreas. [provided by RefSeq].

References

Cirulli, E.T., et al. Eur. J. Hum. Genet. 18(7):815-820(2010)
Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005)
Ottschytsch, N., et al. Proc. Natl. Acad. Sci. U.S.A. 99(12):7986-7991(2002)
Su, K., et al. Biochem. Biophys. Res. Commun. 241(3):675-681(1997)

Images



KCNF1 Antibody (Center) (Cat. #AP17981c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the KCNF1 antibody detected the KCNF1 protein (arrow).

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