



KV1.5 Monoclonal Antibody

Catalog No	YP-mAb-16450
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	KCNA5
Immunogen	The antiserum was produced against synthesized peptide derived from human KCNA5. AA range:253-302
Specificity	KV1.5 Monoclonal Antibody detects endogenous levels of KV1.5 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATFB7;HCK1;HK2;HPCN1;KCNA5;KV1.5;PCN1;Potassium voltage-gated channel subfamily A member 5;Voltage-gated potassium channel HK2;Voltage-gated potassium channel subunit Kv1.5
Observed Band	68kD
Calculated Molecular Weight	68kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Pancreatic islets and insulinoma.
Function	disease:Defects in KCNA5 are the cause of atrial fibrillation familial type 7 (ATFB7) [MIM:612240]. Atrial fibrillation is a common disorder of cardiac rhythm that is hereditary in a small subgroup of patients. It is characterized by disorganized atrial electrical activity, progressive deterioration of atrial electromechanical function and ineffective pumping of blood into the ventricles. It can be associated with palpitations, syncope, thromboembolic stroke, and congestive heart failure.,domain:The amino terminus may be important in determining the rate of inactivation of the channel while the C-terminal PDZ-binding motif 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.,func

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, the function of which could restore the resting membrane potential of beta cells after depolarization and thereby contribute to the regulation of

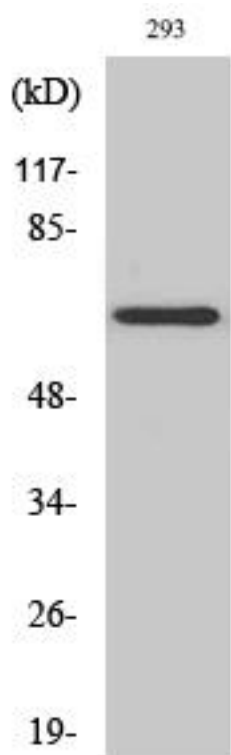
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using KV1.5 Monoclonal Antibody