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Rabbit Anti-Kv1.1 antibody

SL11730R

Product Name:	Kv1.1
Chinese Name:	钾Channel protein1抗体
Alias:	Kv1.1 potassium channel; AEMK; EA1; Episodic ataxia with myokymia; HBK1; HUK1; Kca1 1; Kcna1; KCNA1_HUMAN; Kcpvd; KV1.1; MBK1; mceph; MGC124402; MGC126782; MGC138385; MK1; Potassium channel protein 1; Potassium voltage gated channel shaker related subfamily member 1; Potassium voltage gated channel subfamily A member 1; Potassium voltage-gated channel subfamily A member 1; RBK1; Shak; Shaker related subfamily member 1; Voltage gated potassium channel subunit Kv1.1; Voltage-gated K(+) channel HuKI; Voltage-gated potassium channel HBK1; Voltage-gated potassium channel subunit Kv1.1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	56kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Kv1.1:281-350/495
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

Product Detail:	Voltage-gated K+ channels in the plasma membrane control the repolarization and the frequency of action potentials in neurons, muscles, and other excitable cells. The KV gene family encodes more than 30 genes that comprise the subunits of the K+ channels, and they vary in their gating and permeation properties, subcellular distribution, and expression patterns. Functional KV channels assemble as tetramers consisting of pore-forming alpha-subunits (KV alpha), which include the KV1, KV2, KV3, and KV4 proteins, and accessory or KV beta subunits that modify the gating properties of the coexpressed KV alpha subunits. Differences exist in the patterns of trafficking, biosynthetic processing and surface expression of the major KV1 subunits (KV1.1, KV1.2, KV1.4, KV1.5 and KV1.6) expressed in rat and human brain, suggesting that the individual protein subunits are highly regulated to control for the assembly and formation of functional neuronal channels. **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. **Subunit:** Heterotetramer of potassium channel proteins. Binds KCNAB2 and PDZ domains of DLG1, DLG2 and DLG4 (By similarity). Interacts with LGI1 within a complex containing LGI1, KCNA4 and KCNAB1 (By similarity). **Subcellular Location:** Membrane; Multi-pass membrane protein. **Post-translational modifications:** Palmitoylated on Cys-243; which may be required for membrane targeting. **DISEASE:** Defects in KCNA1 are the cause of episodic ataxia type 1 (EA1) [MIM:160120]; also known as paroxysmal or episodic ataxia with myokymia (EAM) or paroxysmal ataxia with neuromyotonia. EA1 is an autosomal dominant disorder characterized by brief episodes of ataxia and dysarthria. Neurological examination during and between the attacks demonstrates spontaneous, repetitive discharges in the distal musculature (myokymia) that arise from peripheral nerve. Nystagmus is absent. Defects in KCNA1 are the cause of myokymia isolated type 1 (MK1) [MIM:160120]. Myokymia is a condition characterized by spontaneous involuntary contraction of muscle fiber groups that can be observed as vermiform movement of the overlying skin. Electromyography typically shows continuous motor unit activity with spontaneous oligo- and multiplet-discharges of high intraburst frequency (myokymic discharges). Isolated spontaneous muscle twitches occur in many persons and have no grave significance. **Similarity:** Belongs to the potassium channel family. A (Shaker) (TC 1.A.1.2) subfamily.

	Kv1.1/KCNA1 sub-subfamily. **SWISS:** Q09470 **Gene ID:** 3736 **Database links:** Entrez Gene: 3736 Human Entrez Gene: 16485 Mouse Entrez Gene: 24520 Rat Omim: 176260 Human SwissProt: Q09470 Human SwissProt: P16388 Mouse SwissProt: P10499 Rat Unigene: 416139 Human Unigene: 40424 Mouse Unigene: 9769 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.