

电压门控钾通道亚基 Kv7.4 抗体

产品货号： mIR16913

英文名称： KCNQ4

中文名称： 电压门控钾通道亚基 Kv7.4 抗体

别名： DFNA 2; DFNA2; KCNQ 4; Kcnq4; KCNQ4_HUMAN; KQT like 4; KQT-like 4; KV7.4; Potassium channel KQT like 4; Potassium channel subunit alpha KvLQT4; Potassium voltage gated channel KQT like protein 4; Potassium voltage gated channel KQT like subfamily member 4; Potassium voltage gated channel subfamily KQT member 4; Potassium voltage-gated channel subfamily KQT member 4; Voltage gated potassium channel subunit Kv7.4; Voltage-gated potassium channel subunit Kv7.4.

研究领域： 细胞生物 神经生物学 通道蛋白

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Pig, Cow, Horse, Sheep,

产品应用： ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量： 77kDa

细胞定位： 细胞膜

性状： Lyophilized or Liquid

浓度： 1mg/ml

免疫原： KLH conjugated synthetic peptide derived from human KCNQ4:601-695/695

亚型： IgG

纯化方法： affinity purified by Protein A

储存液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： 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

产品介绍 background:

The protein encoded by this gene forms a potassium channel that is thought to play a critical role in the regulation of neuronal excitability, particularly in sensory cells of the cochlea. The current generated by this channel is inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. The encoded protein can form a homomultimeric potassium channel or possibly a heteromultimeric channel in association with the protein encoded by the KCNQ3 gene. Defects in this gene are a cause of nonsyndromic sensorineural deafness type 2 (DFNA2), an autosomal dominant form of progressive hearing loss. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Function:

Probably important in the regulation of neuronal excitability. May underlie a potassium current involved in regulating the excitability of sensory cells of the cochlea. KCNQ4 channels are blocked by linopirdin, XE991 and bepridil, whereas clofilium is without significant effect. Muscarinic agonist oxotremorine-M strongly suppress KCNQ4 current in CHO cells in which cloned KCNQ4 channels were coexpressed with M1 muscarinnic receptors.

Subcellular Location:

Basal cell membrane. Situated at the basal membrane of cochlear outer hair cells.

Tissue Specificity:

Expressed in the outer, but not the inner, sensory hair cells of the cochlea. Slightly expressed in heart, brain and skeletal muscle.

DISEASE:

Defects in KCNQ4 are the cause of deafness autosomal dominant type 2A (DFNA2A) [MIM:600101]. DFNA2A is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.

Similarity:

Belongs to the potassium channel family. KQT (TC 1.A.1.15) subfamily. Kv7.4/KCNQ4 sub-subfamily.

SWISS:

P56696

Gene ID:

9132

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.