

产品名称: Kv2.1 Rabbit Polyclonal Antibody  
产品货号: AP Rab13162



## 产品概述 (Summary)

|                        |                                  |
|------------------------|----------------------------------|
| 产品名称 (Production Name) | Kv2.1 Rabbit Polyclonal Antibody |
| 描述 (Description)       | Rabbit polyclonal Antibody       |
| 宿主 (Host)              | Rabbit                           |
| 应用 (Application)       | IHC, ICC, IF, ELISA              |
| 种属反应性 (Reactivity)     | Human, Mouse, Rat                |

## 产品性能 (Performance)

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| 偶联物 (Conjugation)   | Unconjugated                                                                                      |
| 修饰 (Modification)   | Unmodified                                                                                        |
| 同种型 (Isotype)       | IgG                                                                                               |
| 克隆 (Clonality)      | Polyclonal                                                                                        |
| 形式 (Form)           | Liquid                                                                                            |
| 存放说明 (Storage)      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.          |
| 储存溶液 (Buffer)       | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| 纯化方式 (Purification) | Affinity purification                                                                             |

## 免疫原信息 (Immunogen)

|                        |                                                                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 基因名 (Gene Name)        | KCNB1                                                                                                                                                           |
| 别名 (Alternative Names) | KCNB1; Potassium voltage-gated channel subfamily B member 1; Delayed rectifier potassium channel 1; DRK1; h-DRK1; Voltage-gated potassium channel subunit Kv2.1 |
| 基因 ID (Gene ID)        | 3745.0                                                                                                                                                          |
| 蛋白 ID (SwissProt ID)   | Q14721. The antiserum was produced against synthesized peptide derived from human Kv2.1/KCNB1. AA range: 533-582                                                |

## 产品应用 (Application)

|                          |                                                             |
|--------------------------|-------------------------------------------------------------|
| 稀释比 (Dilution Ratio)     | IHC 1:100-1:300, ICC/IF 1:200-1:1000, ELISA 1:10000-1:20000 |
| 蛋白分子量 (Molecular Weight) |                                                             |

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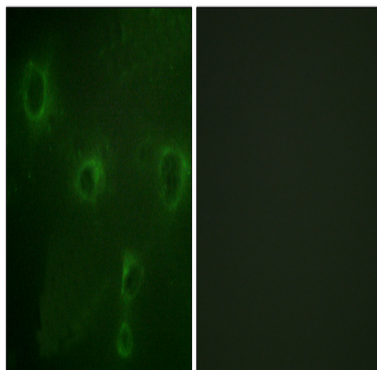
## 研究背景 (Background)

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. 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, shab-related subfamily. This member is a delayed rectifier potassium channel and its activity is modulated by some other family members. [provided by RefSeq, Jul 2008],domain:The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.,domain:The tail may be important in modulation of channel activity and/or targeting of the channel to specific subcellular compartments.,function:Mediates the voltage-dependent potassium ion permeability of excitable membranes. Channels open or close in response to the voltage difference across the membrane, letting potassium ions pass in accordance with their electrochemical gradient.,PTM:Highly phosphorylated on serine residues in the C-terminal. Differential phosphorylation on a subset of serines allows graded activity-dependent regulation of channel gating. Phosphorylation on Ser-457, Ser-541, Ser-567, Ser-607, Ser-656 and Ser-720 as well as the N-terminal Ser-15 are all regulated by calcineurin-mediated dephosphorylation. Particularly, Ser-607 and Tyr-128 are significant sites of voltage-gated regulation through phosphorylation/ dephosphorylation activities. Tyr-128 can be dephosphorylated by PTPalpha and cyt-PTPepsilon. Phosphorylation levels on Ser-607 are supersensitive to neuronal activity. Phosphorylation on Ser-567 is reduced during postnatal development with low levels at P2 and P5. Levels then increase to reach adult levels by P14. Phosphorylation levels on Ser-564 and Ser-607 are greatly reduced during seizures, by 40% and 85% respectively.,similarity:Belongs to the potassium channel family. B (Shab) subfamily.,subunit:Heteromultimer with KCNG2, KCNG3, KCNG4, KCNS1, KCNS2, KCNS3 and KCNV2.,

## 研究领域 (Research Area)

Taste transduction;

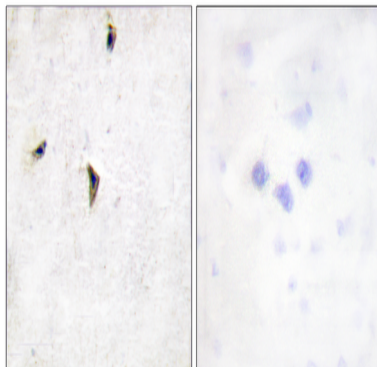
## 图片 (Image Data)



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Immunofluorescence analysis of COS7 cells, using Kv2.1/KCNB1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Kv2.1/KCNB1 Antibody. The picture on the right is blocked with the synthesized peptide.

#### **注意事项 (Note)**

For research use only .