



# KChIP1 Polyclonal Antibody

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| <b>Catalog No</b>         | YP-Ab-03942                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity</b>         | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications</b>       | IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Gene Name</b>          | KCNIP1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Protein Name</b>       | Kv channel-interacting protein 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human KCIP1. AA range:1-50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | KChIP1 Polyclonal Antibody detects endogenous levels of KChIP1 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Dilution</b>           | Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>           | KCNIP1; KCHIP1; VABP; Kv channel-interacting protein 1; KChIP1; A-type potassium channel modulatory protein 1; Potassium channel-interacting protein 1; Vesicle APC-binding protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Observed Band</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Cell Pathway</b>       | Cell membrane ; Peripheral membrane protein . Cytoplasm . Cell projection, dendrite .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Tissue Specificity</b> | Isoform 1 and isoform 2 are expressed in brain and kidney. Isoform 1 is also expressed in liver, pancreas, skeletal muscle, small intestine and testis. Isoform 2 is also expressed in lung, pancreas, leukocytes, prostate and thymus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>           | function:Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels. Probably modulates channels density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform-specific manner. In vitro, modulates KCND1/Kv4.1 and KCND2/Kv4.2 currents. Seems to be involved in KCND2 trafficking to the cell surface.,similarity:Belongs to the recoverin family.,similarity:Contains 4 EF-hand domains.,subunit:Component of heteromultimeric potassium channels. Interacts with KCND3 and the N-terminal domain of KCND2. Probably part of a complex consisting of KCNIP1, KCNIP2 isoform 3 and KCND2. Can self-associate to form homodimers and homotetramers. Interacts with KCNIP2 isoform 3 in a calcium-dependent manner. Interacts with Naja atra venom CTX3.,tissue |



specificity: Isoform 1 and isoform 2 are expressed in brain and kidney. Isoform

### Background

This gene encodes a member of the family of cytosolic voltage-gated potassium (Kv) channel-interacting proteins (KCNIPs), which belong to the neuronal calcium sensor (NCS) family of the calcium binding EF-hand proteins. They associate with Kv4 alpha subunits to form native Kv4 channel complexes. The encoded protein may regulate rapidly inactivating (A-type) currents, and hence neuronal membrane excitability, in response to changes in the concentration of intracellular calcium. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2013],

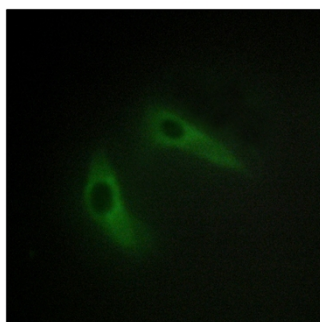
### matters needing attention

Avoid repeated freezing and thawing!

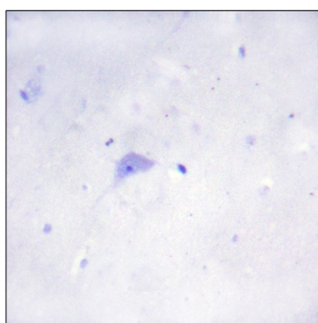
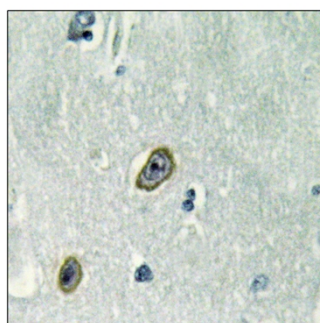
### Usage suggestions

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

## Products Images



Immunofluorescence analysis of HeLa cells, using KCIP1 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using KCIP1 Antibody. The picture on the right is blocked with the synthesized peptide.