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Anti-KChIP2 Picoband Antibody

Catalog # ABO12338

Specification

Anti-KChIP2 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9NS61
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Kv channel-interacting protein 2(KCNIP2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-KChIP2 Picoband Antibody - Additional Information

Gene ID 30819

Other Names
Kv channel-interacting protein 2, KChIP2, A-type potassium channel modulatory protein 2, Cardiac voltage-gated potassium channel modulatory subunit, Potassium channel-interacting protein 2, KCNIP2, KCHIP2

Calculated MW
30907 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Isoform 1: Cell membrane ; Lipid-anchor . Detected on lipid rafts (By similarity). .

Tissue Specificity
Expressed in brain. Colocalizes with KCND2 in excitatory neurons including cortical and hippocampal CA1 pyramidal cells. Isoform 3 is expressed in heart and in umbilical vein endothelial cells. Not expressed in fetal heart. .

Protein Name
Kv channel-interacting protein 2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human KChIP2 (78-112aa DEFELSTVCHRPEGLEQLQEQTKFTRKELQVLYR), different from the related mouse and rat sequences by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-KChIP2 Picoband Antibody - Protein Information

Name KCNIP2

Synonyms KCHIP2

Function
Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels. Modulates channel density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform-specific manner. In vitro, modulates KCND2/Kv4.2 and KCND3/Kv4.3 currents. Involved in KCND2 and KCND3 trafficking to the cell surface. May be required for the expression of I(To) currents in the heart (By similarity).

Cellular Location
[Isoform 1]: Cell membrane {ECO:0000250|UniProtKB:Q9JM59}; Lipid-anchor {ECO:0000250|UniProtKB:Q9JM59}. Note=Detected on lipid rafts (By similarity). {ECO:0000250|UniProtKB:Q9JM59} [Isoform 6]: Cell membrane {ECO:0000250|UniProtKB:Q9JM59}; Lipid-anchor {ECO:0000250|UniProtKB:Q9JM59}

Tissue Location
Expressed in brain. Colocalizes with KCND2 in excitatory neurons including cortical and hippocampal CA1 pyramidal cells. Isoform 3 is expressed in heart and in umbilical vein endothelial cells. Not expressed in fetal heart

Anti-KChIP2 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-KChIP2 Picoband Antibody - Images

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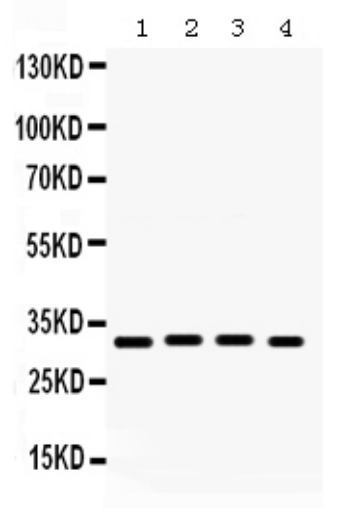
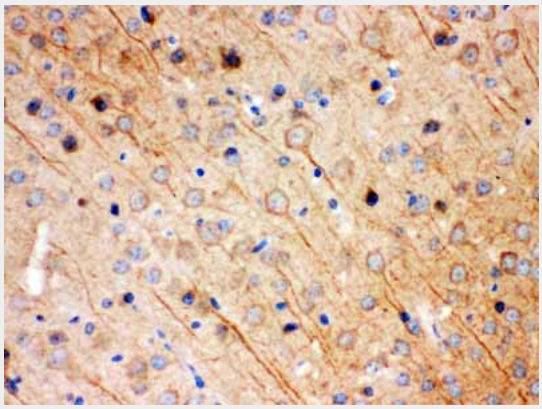
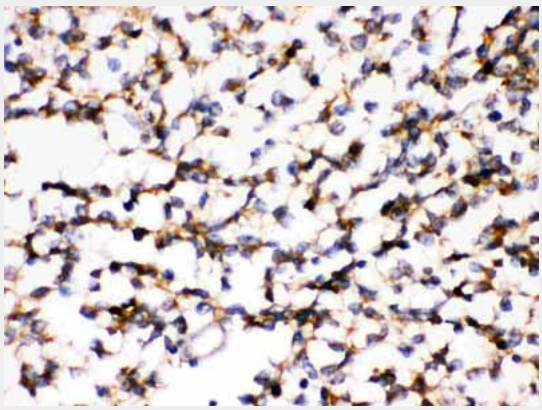


Anti- KCNIP2 Picoband antibody, ABO12338, Western blottingAll lanes: Anti KCNIP2 (ABO12338) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: Mouse Cardiac Muscle Tissue Lysate at 50ugLane 4: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 31KDObserved bind size: 31KD



Anti- KCNIP2 Picoband antibody, ABO12338,IHC(P)IHC(P): Mouse Brain Tissue



Anti- KCNIP2 Picoband antibody, ABO12338,IHC(P)IHC(P): Human Glioma Tissue

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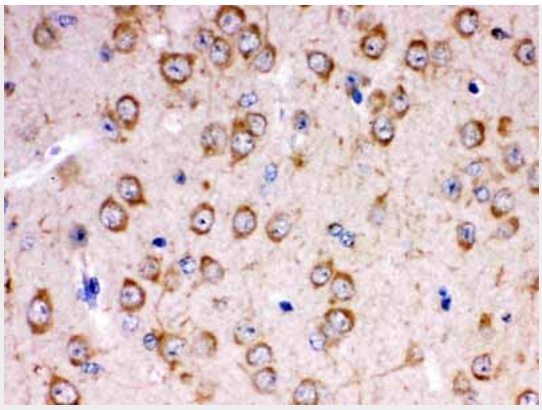

Anti- KCNIP2 Picoband antibody, ABO12338,IHC(P)IHC(P): Rat Brain Tissue

Anti-KChIP2 Picoband Antibody - Background

Kv channel-interacting protein 2 also known as KChIP2 is a protein that in humans is encoded by the KCNIP2 gene. This gene encodes a member of the family of voltage-gated potassium (Kv) channel-interacting proteins, which belong to the recoverin branch of the EF-hand superfamily. Members of the KCNIP family are small calcium binding proteins. They all have EF-hand-like domains, and differ from each other in the N-terminus. And they are integral subunit components of native Kv4 channel complexes. They may regulate A-type currents, and hence neuronal excitability, in response to changes in intracellular calcium. Alternative splicing results in multiple transcript variant encoding different isoforms.