10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-KChIP2 Picoband Antibody

Catalog # ABO12338

Product Information

Application	WB, IHC-P
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

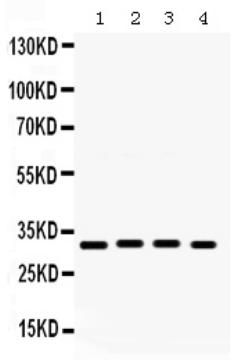
Protein Information

Name	KCNIP2 (HGNC:15522)
Function	Regulatory subunit of Kv4/D (Shal)-type voltage-gated rapidly inactivating A-type potassium channels (PubMed:10676964, PubMed:11287421, PubMed:11684073, PubMed:12297301, PubMed:14623880, PubMed:34997220). Modulates channel density, inactivation kinetics and rate of recovery from inactivation in a calcium-dependent and isoform- specific manner (PubMed:10676964, PubMed:11287421, PubMed:11684073, PubMed:12297301, PubMed:14623880, PubMed:34997220). Involved in KCND2 and KCND3 trafficking to the cell surface (PubMed:12829703). 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

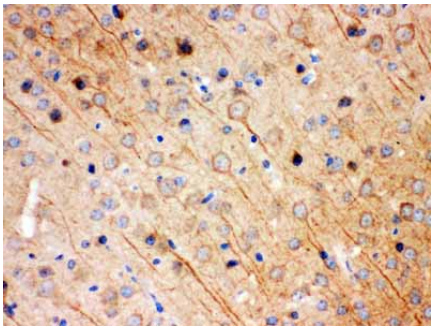
Background

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.

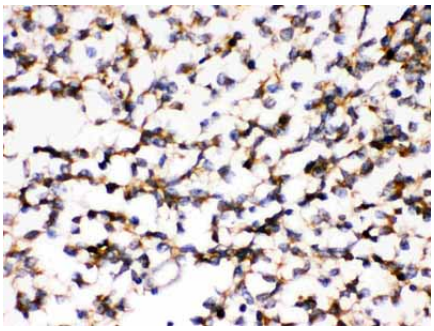
Images



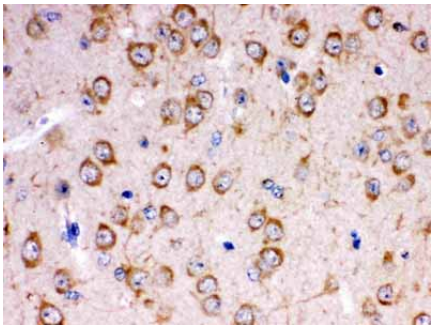
Anti- KCNIP2 Picoband antibody, ABO12338, Western blottingAll lanes: Anti KCNIP2 (ABO12338) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: Mouse Cardiac Muscle Tissue Lysate at 50ugLane 4: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 31KDObserved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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.