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Anti-KCNA5 Picoband Antibody

Catalog # ABO12337

Product Information

Application	WB
Primary Accession	P22460
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Potassium voltage-gated channel subfamily A member 5(KCNA5) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3741
Other Names	Potassium voltage-gated channel subfamily A member 5, HPCN1, Voltage-gated potassium channel HK2, Voltage-gated potassium channel subunit Kv1.5, KCNA5
Calculated MW	67228
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Pancreatic islets and insulinoma.
Source	Eukaryota
Protein Name	Potassium voltage-gated channel subfamily A member 5
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 C-terminus of human KCNA5 (583-613aa LEKCNVKAKSNVDLRRSLYALCLDTSRETDL), different from the related mouse and rat sequences by two amino acids.
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.

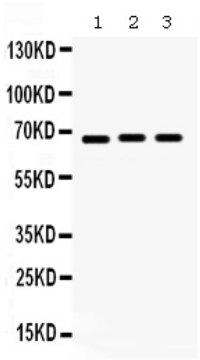
Protein Information

Name	KCNA5
Function	Voltage-gated potassium channel that mediates transmembrane potassium transport in excitable membranes. Forms tetrameric potassium- selective channels through which potassium ions pass in accordance with their electrochemical gradient. The channel alternates between opened and closed conformations in response to the voltage difference across the membrane. Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNA1, KCNA2, KCNA4, KCNA5, and possibly other family members as well; channel properties depend on the type of alpha subunits that are part of the channel (PubMed:12130714). Channel properties are modulated by cytoplasmic beta subunits that regulate the subcellular location of the alpha subunits and promote rapid inactivation (PubMed:12130714). Homotetrameric channels display rapid activation and slow inactivation (PubMed:12130714, PubMed:8505626). Required for normal electrical conduction including formation of the infranodal ventricular conduction system and normal action potential configuration, as a result of its interaction with XIRP2 (By similarity). May play a role in regulating the secretion of insulin in normal pancreatic islets.
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Pancreatic islets and insulinoma.

Background

Potassium voltage-gated channel, shaker-related subfamily, member 5, also known as KCNA5 or Kv1.5, is a protein that in humans is encoded by the KCNA5 gene. Potassium channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. KCNA5 encodes a member of the potassium channel, voltage-gated, shaker-related subfamily. This member contains six membrane-spanning domains with a shaker-type repeat in the fourth segment. It belongs to the delayed rectifier class, the function of which could restore the resting membrane potential of beta cells after depolarization, thereby contributing to the regulation of insulin secretion. This gene is intronless, and the gene is clustered with genes KCNA1 and KCNA6 on chromosome 12. Mutations in this gene have been related to both atrial fibrillation and sudden cardiac death. KCNA5 are also key players in pulmonary vascular function, where they play a role in setting the resting membrane potential and its involvement during hypoxic pulmonary vasoconstriction.

Images



Anti- KCNA5 Picoband antibody, ABO12337, Western blottingAll lanes: Anti KCNA5 (ABO12337) at 0.5ug/mlLane 1: 293T Whole Cell Lysate at 40ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: PANC Whole Cell Lysate at 40ugPredicted bind size: 67KDObserved bind size: 67KD

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