

Kv1.5 Polyclonal Antibody

Catalog # AP63702

Specification

Kv1.5 Polyclonal Antibody - Product Information

Application WB
Primary Accession P22460
Reactivity Human
Host Rabbit
Clonality Polyclonal

Kv1.5 Polyclonal Antibody - Additional Information

Gene ID 3741

Other Names

KCNA5; Potassium voltage-gated channel subfamily A member 5; HPCN1; Voltage-gated potassium channel HK2; Voltage-gated potassium channel subunit Kv1.5

Dilution

WB~~WB 1:1000-2000

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Kv1.5 Polyclonal Antibody - 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).

href="http://www.uniprot.org/citations/12130714" target="_blank">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

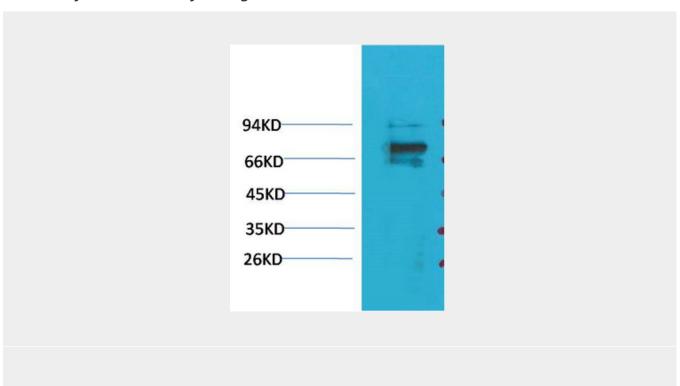
Pancreatic islets and insulinoma.

Kv1.5 Polyclonal Antibody - Protocols

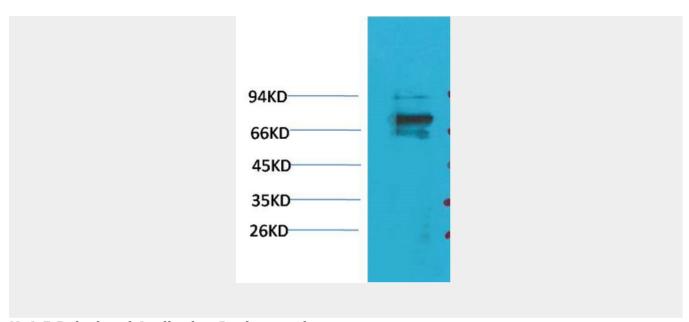
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Kv1.5 Polyclonal Antibody - Images







Kv1.5 Polyclonal Antibody - Background

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:8505626, PubMed:12130714). May play a role in regulating the secretion of insulin in normal pancreatic islets. Isoform 2 exhibits a voltage-dependent recovery from inactivation and an excessive cumulative inactivation (PubMed:11524461).