10320 Camino Santa Fe, Suite G
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Kv3.1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51297

Specification

Kv3.1 Antibody - Product Information

Application	**WB**
Primary Accession	P48547
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**58 KDa**
Antigen Region	**191 - 250**

Kv3.1 Antibody - Additional Information

Gene ID 3746

Other Names
Potassium voltage-gated channel subfamily C member 1, NGK2, Voltage-gated potassium channel subunit Kv31, Voltage-gated potassium channel subunit Kv4, KCNC1

Target/Specificity
KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Kv3.1. The exact sequence is proprietary.

Dilution
WB~~ 1:1000

Format
0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Kv3.1 Antibody - Protein Information

Name KCNC1 {ECO:0000303|PubMed:8449507, ECO:0000312|HGNC:HGNC:6233}

Function
Voltage-gated potassium channel that opens in response to the voltage difference across the membrane and through which potassium ions pass in accordance with their electrochemical gradient (PubMed:25401298, PubMed:35840580). The mechanism is time-dependent and inactivation is slow (By similarity). Plays an important role in the rapid repolarization of fast-firing brain neurons (By similarity). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well (By similarity).

Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons (By similarity).

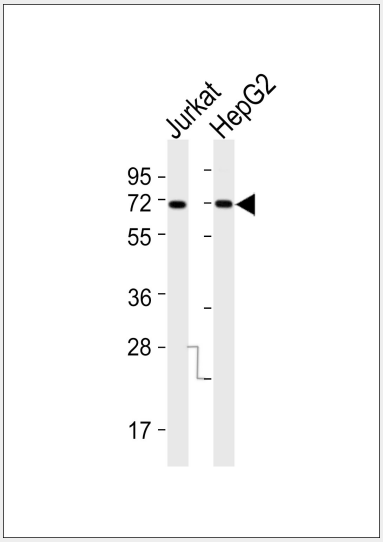
Cellular Location
Cell membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P25122}. Presynaptic cell membrane {ECO:0000250|UniProtKB:P25122}. Note=Localizes in parallel fiber membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones. {ECO:0000250|UniProtKB:P25122}

Kv3.1 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

Kv3.1 Antibody - Images



All lanes : Anti-Kv3.1 Antibody at 1:1000 dilution Lane 1: Jurkat whole cell lysates Lane 2: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 58 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Kv3.1 Antibody - Background

Mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient.

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Ried T.,et al.Genomics 15:405-411(1993).
Grissmer S.,et al.J. Biol. Chem. 267:20971-20979(1992).