

# Kv3.1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51297

## **Product Information**

Application	WB
Primary Accession	<u>P48547</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57942

## **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 derived from human Kv3.1
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

#### **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: <u>25401298</u> , PubMed: <u>35840580</u> ). 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

## 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.

### References

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

#### 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.

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