

KV3.1 Polyclonal Antibody

Catalog # AP70693

Product Information

Application WB, IHC-P Primary Accession P48547

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW57942

Additional Information

Gene ID 3746

Other Names KCNC1; Potassium voltage-gated channel subfamily C member 1; NGK2;

Voltage-gated potassium channel subunit Kv3.1; Voltage-gated potassium

channel subunit Kv4

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A

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

azide.

Storage Conditions -20°C

Protein Information

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

FunctionVoltage-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

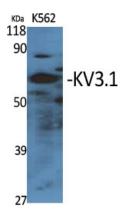
membranes, distributed on the perisynaptic and extrasynaptic membranes

away from the active zones. {ECO:0000250 | UniProtKB:P25122}

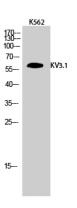
Background

Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient (PubMed: 25401298). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well. Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons.

Images



Western Blot analysis of various cells using KV3.1 Polyclonal Antibody



Western Blot analysis of K562 cells using KV3.1 Polyclonal Antibody

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