

Datasheet for ABIN7043530
anti-Kv1.6/KCNA6 antibody (Intracellular)



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1 Image

Overview

Quantity:	50 µL
Target:	Kv1.6/KCNA6 (KCNA6)
Binding Specificity:	AA 463-530, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Kv1.6/KCNA6 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to KV1.6 (KCNA6) Channel
Immunogen:	Immunogen: GST fusion protein Immunogen Sequence: GST fusion protein with the sequence NYFYHRETEQEEQGQYTHVTCGQPTPDLKATDNGLGKPDFAEASRERRSSYLPTPHRAYAEKRMLTEV, corresponding to amino acid residues 463-530 of rat KV1.6
Isotype:	IgG
Specificity:	Intracellular, C-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - 67,68 amino acid residues identical, human - 63

Product Details

Characteristics: Anti-Kv1.6 (KCNA6) Antibody is directed against an epitope of the rat KV1.6 channel. Anti-KV1.6 (KCNA6) Antibody (ABIN7043530 and ABIN7044901) can be used in western blot, immunohistochemistry and immunocytochemistry applications. It has been designed to recognize KV1.6 from human, rat and mouse samples.

Purification: The serum was depleted of anti-GST antibodies by affinity chromatography on immobilized GST and then the IgG fraction was purified on immobilized antigen.

Target Details

Target: Kv1.6/KCNA6 (KCNA6)

Alternative Name: KCNA6 ([KCNA6 Products](#))

Background: Potassium voltage-gated channel subfamily A member 6, RCK2, Human brain potassium channel 2, HBK2, KV1.6 is a mammalian voltage-dependent K⁺ channel, homologous to the Drosophila Shaker K⁺ channel. KV1.6 was first cloned from human brain.¹ Eight Shaker-related genes exist in mammals constituting the KV1 subfamily of the large KV channel family of genes.^{2A} A functional KV1 channel is either a membrane spanning homotetramer or heterotetramer, which is composed of members of the same subfamily. In addition several auxiliary subunits and intracellular proteins might interact with the channel and affect its function. The structure of KV1.6 channel is similar to all KV channels and includes six membrane spanning helices creating a voltage sensor domain and a pore domain.² The channel is expressed in neurons and other supporting cells in the brain, in cardiac and smooth muscle tissue as well as in ovary and testis² and its activity influences the membrane potential and excitability of expressing cells. KV1.6 channels are sensitive to low doses of TEA (7 mM) and high doses of 4-AP (1.5 mM), the "classical" non-selective potassium channel blockers. Several toxins from snakes, scorpions and sea anemones venoms are potent blockers (affecting the channels in the nanomolar range) of KV1.6 channels. Among these the most potent and selective are α -Dendrotoxin ((9-25 nM) and δ -Dendrotoxin (23 nM), Agitoxin-2 (0.036 nM), Hongotoxin-1 (6 nM), Margatoxin (5 nM) and Stichodactyla Toxin (0.16 nM).³

Alternative names: KV1.6 (KCNA6), Potassium voltage-gated channel subfamily A member 6, RCK2, Human brain potassium channel 2, HBK2

Gene ID: 64358

NCBI Accession: [NM_002235](#)

UniProt: [P17659](#)

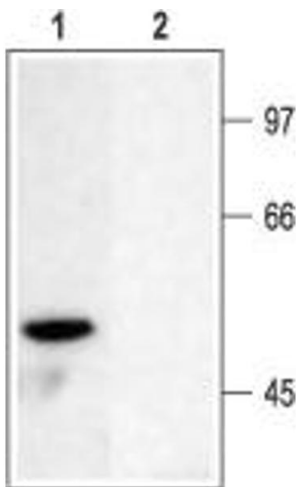
Application Details

Application Notes:	Antigen preadsorption control: 3 µg fusion protein per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Cited Application: IHC Negative Control: (ABIN7236520) Blocking Peptide: (ABIN7236520)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat brain membranes: -
1. Anti-KV1.6 (KCNA6) Antibody (ABIN7043530 and ABIN7044901), (1:200).2. Anti-KV1.6 (KCNA6) Antibody, preincubated with Kv1.6/KCNA6 Blocking Peptide (#BLP-PC003).