abcam

Product datasheet

Anti-Kvl.1 potassium channel antibody ab65790

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Overview

Product name Anti-Kv1.1 potassium channel antibody

Description Rabbit polyclonal to Kv1.1 potassium channel

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide derived from the C terminal domain of human Kv1.1 potassium channel.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Constituent: Whole serum

Purity Whole antiserum

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab65790 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Application	Abreviews	Notes
WB		1/1000 - 1/5000. Detects a band of approximately 57 kDa (predicted molecular weight: 57 kDa).

Target

Function

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.

Involvement in disease

Defects in KCNA1 are the cause of episodic ataxia type 1 (EA1) [MIM:160120]; also known as paroxysmal or episodic ataxia with myokymia (EAM) or paroxysmal ataxia with neuromyotonia. EA1 is an autosomal dominant disorder characterized by brief episodes of ataxia and dysarthria. Neurological examination during and between the attacks demonstrates spontaneous, repetitive discharges in the distal musculature (myokymia) that arise from peripheral nerve. Nystagmus is absent.

Defects in KCNA1 are the cause of myokymia isolated type 1 (MK1) [MIM:160120]. Myokymia is a condition characterized by spontaneous involuntary contraction of muscle fiber groups that can be observed as vermiform movement of the overlying skin. Electromyography typically shows continuous motor unit activity with spontaneous oligo- and multiplet-discharges of high intraburst frequency (myokymic discharges). Isolated spontaneous muscle twitches occur in many persons and have no grave significance.

Sequence similarities

Belongs to the potassium channel family. A (Shaker) (TC 1.A.1.2) subfamily. Kv1.1/KCNA1 subsubfamily.

Domain

The N-terminus may be important in determining the rate of inactivation of the channel while the tail may play a role in modulation of channel activity and/or targeting of the channel to specific subcellular compartments.

The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.

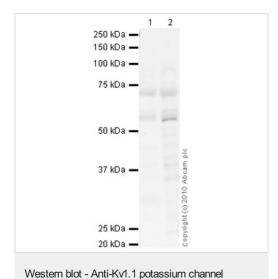
Post-translational modifications

Palmitoylated on Cys-243; which may be required for membrane targeting.

Cellular localization

Membrane.

Images



antibody (ab65790)

All lanes : Anti-Kv1.1 potassium channel antibody (ab65790) at 1/500 dilution

Lane 1 : Human brain tissue lysate - total protein (<u>ab29466</u>)

Lane 2: Human testis tissue lysate - total protein (ab30257)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 57 kDa **Observed band size:** 57 kDa

Additional bands at: 73 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 3 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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