abcam

Product datasheet

Anti-Kv1.1 potassium channel antibody ab32433

★★★★★ 2 Abreviews 15 References 3 图像

概述

产品名称	Anti-Kv1.1 potassium channel抗体
描述	兔多克隆抗体to Kv1.1 potassium channel
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, IHC-P, WB, IHC-FoFr
种属反应性	**与反应:** Mouse, Rat, Chicken, Human
免疫原	Synthetic peptide conjugated to KLH derived from within residues 450 to the C-terminus of Rat Kv1.1.参阅Abcam的专有抗源政策(Peptide available as **ab32432**.)
阳性对照	ab32433 tested positive in Western Blot using the following tissue lysates: Mouse brain, rat brain, and rat spinal cord.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab32433于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P		Use at an assay dependent concentration. PubMed: 21632505

应用	Ab评论	说明
WB	★★★★☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 70 kDa (predicted molecular weight: 56 kDa). ab32433 detects a band at 70kDa. While this differs to its predicted molecular weight of 56kDa, this migration has been observed in the literature (PMID: PMC2290329). Abcam recommends using milk as the blocking agent.
IHC-FoFr	★★★★★ (1)	1/3000.

靶标

功能

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.

疾病相关

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.

序列相似性

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

结构域

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.

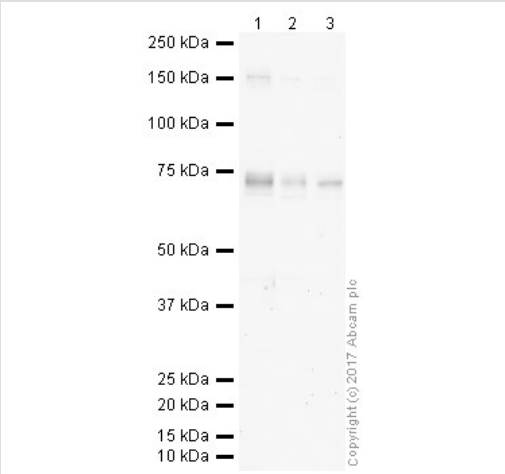
翻译后修饰

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

细胞定位

Membrane.

图片



Western blot - Anti-Kv1.1 potassium channel antibody (ab32433)

All lanes : Anti-Kv1.1 potassium channel antibody (ab32433) at 1 µg/ml

Lane 1 : Brain (Mouse) Tissue Lysate
Lane 2 : Brain (Rat) Tissue Lysate
Lane 3 : Spinal Cord (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

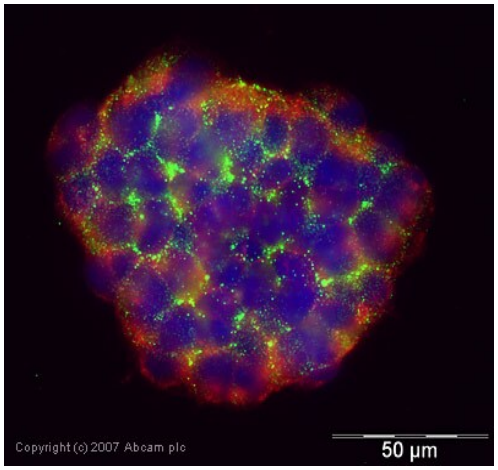
Predicted band size: 56 kDa
Observed band size: 70 kDa

Exposure time: 20 minutes

ab32433 detects a band at 70kDa. While this differs to its predicted molecular weight of 56kDa, this migration has been observed in the literature (PMID: PMC2290329).

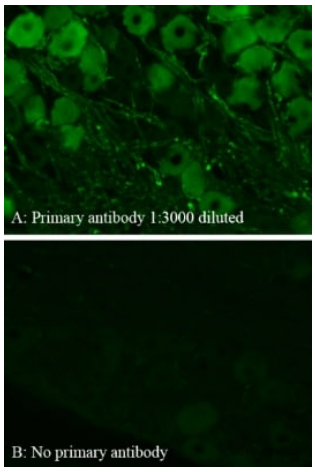
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab32433 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Immunocytochemistry/ Immunofluorescence - Anti-Kv1.1 potassium channel antibody (ab32433)

ICC/IF image of ab32433 stained human HEK 293 cells. The cells were PFA fixed (10 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab32433, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Kv1.1 potassium channel antibody (ab32433)

This image is courtesy of an abreview submitted by Sophie Pezet, ESPCI, France

IHC FoFR image of ab32433 stained sections of rat dorsal root ganglion (20 um). The tissues was from perfusion fixed animals with 4% PFA and later postfixed overnight in the same fixative. They were cryoprotected in 30% sucrose and cut using a cryostat.

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