abcam

Product datasheet

Anti-KCNK18/TRESK antibody ab106411

3 Images

Overview

Product name	Anti-KCNK18/TRESK antibody
Description	Rabbit polyclonal to KCNK18/TRESK
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P
Species reactivity	**Reacts with:** Rat
Immunogen	A 17 amino acid peptide from near the center of Human KCNK18/TRESK (NP_862823).
Positive control	Rat brain tissue
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. Store at 4°C (stable for up to 12 months).
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab106411 in the following tested applications.

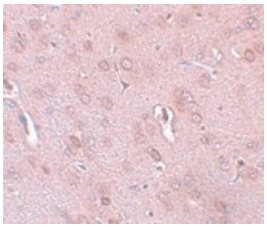
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 44 kDa.
IHC-P		Use a concentration of 5 µg/ml.

Target

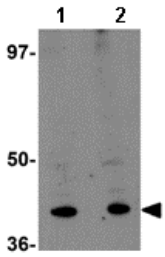
Function	Outward rectifying potassium channel. Produces rapidly activating outward rectifier K(+) currents. May function as background potassium channel that sets the resting membrane potential. Channel activity is directly activated by calcium signal. Activated by the G(q)-protein coupled receptor pathway. The calcium signal robustly activates the channel via calcineurin, whereas the anchoring of 14-3-3/YWHAH interferes with the return of the current to the resting state after activation. Inhibited also by arachidonic acid and other naturally occurring unsaturated free fatty acids. Channel activity is also enhanced by volatile anesthetics, such as isoflurane. Appears to be the primary target of hydroxy-alpha-sanshool, an ingredient of Schezuan pepper. May be involved in the somatosensory function with special respect to pain sensation.
Tissue specificity	Expressed specifically in dorsal root ganglion and trigeminal ganglion neurons. Detected at low levels in spinal cord.
Involvement in disease	Defects in KCNK18 are a cause of migraine with or without aura type 13 (MGR13) [MIM:613656]. A form of migraine trasmitted in an autosomal dominant pattern. Migraine is a disabling symptom complex of periodic headaches, usually temporal and unilateral. Headaches are often accompanied by irritability, nausea, vomiting and photobia, preceded by constriction of the cranial arteries. The two major subtypes are common migraine (migraine without aura) and classic migraine (migraine with aura). Classic migraine is characterized by recurrent attacks of reversible neurological symptoms (aura) that precede or accompany the headache. Aura may include a combination of sensory disturbances, such as blurred vision, hallucinations, vertigo, numbness and difficulty in concentrating and speaking. Note=Susceptibility to migraine has been shown to be conferred by a frameshift mutation that segregates with the disorder in a large multigenerational family. Migraine was associated with sensitivity to lights, sounds, and smells, as well as nausea and occasional vomiting. Triggers included fatigue, alcohol and bright lights. Mutations in KCNK18 are a rare cause of migraine.
Sequence similarities	Belongs to the two pore domain potassium channel (TC 1.A.1.8) family.
Post-translational modifications	Phosphorylation of Ser-252 is required for the binding of 14-3-3eta/YWHAH. Calcineurin-mediated dephosphorylation of Ser-264 enhances channel activity. N-glycosylated.
Cellular localization	Cell membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KCNK18/TRESK antibody (ab106411)

ab106411, at 5 µg/ml, staining KCNK18/TRESK in paraffin embedded Rat brain tissue.



Western blot - Anti-KCNK18/TRESK antibody (ab106411)

Lane 1 : Anti-KCNK18/TRESK antibody (ab106411) at 1 µg/ml
Lane 2 : Anti-KCNK18/TRESK antibody (ab106411) at 2 µg/ml

All lanes : Rat brain tissue lysate

Lysates/proteins at 15 µg per lane.

Predicted band size: 44 kDa

Immunocytochemistry/ Immunofluorescence - Anti-KCNK18/TRESK antibody (ab106411)

Immunofluorescence of TRESK in Rat Brain cells using ab106411 at 20 ug/ml.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors