




Product datasheet

Anti-KCNC1 antibody ab254906

5 Images

Overview

Product name	Anti-KCNC1 antibody
Description	Rabbit polyclonal to KCNC1
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Recombinant fragment corresponding to Human KCNC1 aa 100-200. Database link: P48547  Run BLAST with  Run BLAST with
Positive control	ICC/IF: U-2 OS cells. IHC-P: Human cerebellum and cerebral cortex tissue.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab254906 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 a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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. 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.

Involvement in disease

Epilepsy, progressive myoclonic 7

Sequence similarities

Belongs to the potassium channel family. C (Shaw) (TC 1.A.1.2) subfamily. Kv3.1/KCNC1 sub-subfamily.

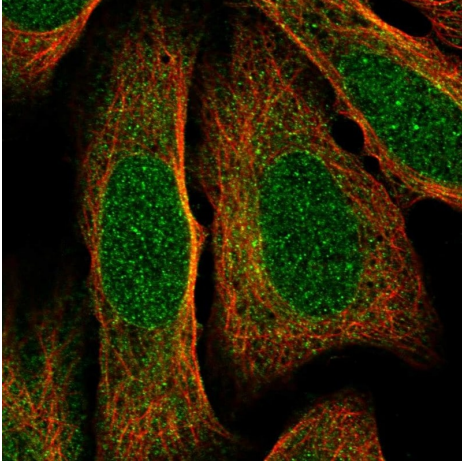
Domain

The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.
The tail may be important in modulation of channel activity and/or targeting of the channel to specific subcellular compartments.

Cellular localization

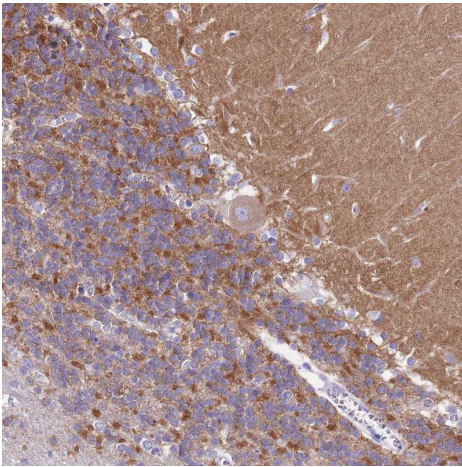
Cell membrane.

Images



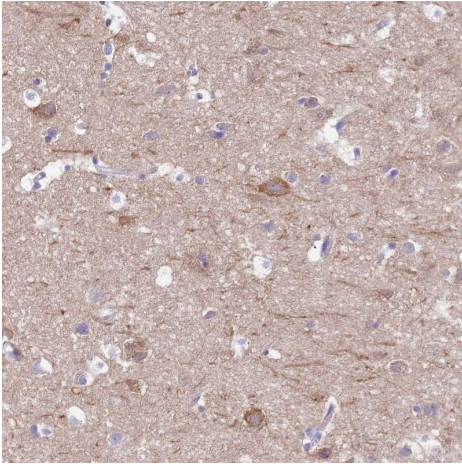
PFA fixed, Triton X-100 permeabilized U-2 OS (Human bone osteosarcoma epithelial cell line) cells labeling KCNC1 using ab254906 at 4µg/ml (green) in ICC/IF.

Immunocytochemistry/ Immunofluorescence - Anti-KCNC1 antibody (ab254906)



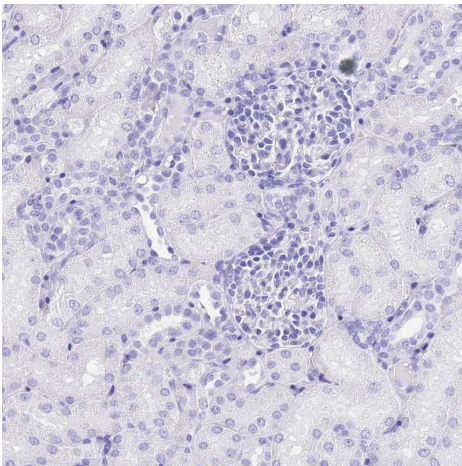
Paraffin-embedded human cerebellum tissue stained for KCNC1 using ab254906 at 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KCNC1 antibody (ab254906)



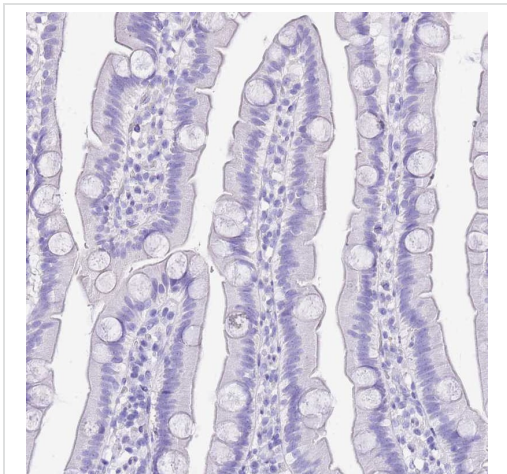
Paraffin-embedded human cerebral cortex tissue stained for KCNC1 using ab254906 at 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KCNC1 antibody (ab254906)



Paraffin-embedded human kidney tissue stained for KCNC1 using ab254906 at 1/500 dilution in immunohistochemical analysis. No positivity in cells in tubules as expected.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KCNC1 antibody (ab254906)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KCNC1 antibody (ab254906)

Paraffin-embedded human small intestine tissue stained for KCNC1 using ab254906 at 1/500 dilution in immunohistochemical analysis. No positivity in glandular cells as expected.

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

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