

KCNC3 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14547b

Specification

KCNC3 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q14003
Other Accession	NP_004968.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	80578
Antigen Region	639-667

KCNC3 Antibody (C-term) - Additional Information

Gene ID 3748

Other Names

Potassium voltage-gated channel subfamily C member 3, KSHIID, Voltage-gated potassium channel subunit Kv33, KCNC3

Target/Specificity

This KCNC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 639-667 amino acids from the C-terminal region of human KCNC3.

Dilution

WB~~1:1000

Format

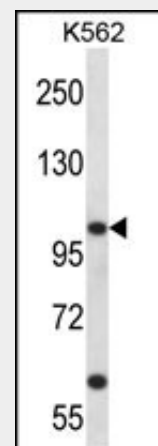
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KCNC3 Antibody (C-term) is for research use only and not for use in diagnostic or



KCNC3 Antibody (C-term) (Cat. #AP14547b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the KCNC3 antibody detected the KCNC3 protein (arrow).

KCNC3 Antibody (C-term) - Background

The Shaker gene family of Drosophila encodes components of voltage-gated potassium channels and is comprised of four subfamilies. Based on sequence similarity, this gene is similar to one of these subfamilies, namely the Shaw subfamily. The protein encoded by this gene belongs to the delayed rectifier class of channel proteins and is an integral membrane protein that mediates the voltage-dependent potassium ion permeability of excitable membranes.

KCNC3 Antibody (C-term) - References

Figueroa, K.P., et al. Hum. Mutat. 31(2):191-196(2010)
Waters, M.F., et al. Cerebellum 7(2):165-169(2008)
Waters, M.F., et al. Nat. Genet. 38(4):447-451(2006)

therapeutic procedures.

Gutman, G.A., et al. Pharmacol. Rev.
57(4):473-508(2005)
Brusco, A., et al. Arch. Neurol.
61(5):727-733(2004)

KCNC3 Antibody (C-term) - Protein Information

Name KCNC3

Function

Voltage-gated potassium channel that plays an important role in the rapid repolarization of fast-firing brain neurons. The channel opens in response to the voltage difference across the membrane, forming a potassium-selective channel through which potassium ions pass in accordance with their electrochemical gradient. The channel displays rapid activation and inactivation kinetics (PubMed:10712820, PubMed:26997484, PubMed:22289912, PubMed:23734863, PubMed:16501573, PubMed:19953606, PubMed:21479265, PubMed:25756792). It plays a role in the regulation of the frequency, shape and duration of action potentials in Purkinje cells. Required for normal survival of cerebellar neurons, probably via its role in regulating the duration and frequency of action potentials that in turn regulate the activity of voltage-gated Ca(2+) channels and cellular Ca(2+) homeostasis (By similarity). Required for normal motor function (PubMed:23734863, PubMed:16501573, PubMed:<a href="http://www.uniprot.org/ci

tations/19953606"
target="_blank">19953606,
PubMed:<a href="http://www.uniprot.org/ci
tations/21479265"
target="_blank">21479265,
PubMed:<a href="http://www.uniprot.org/ci
tations/25756792"
target="_blank">25756792). Plays a
role in the reorganization of the cortical
actin cytoskeleton and the formation of
actin veil structures in neuronal growth
cones via its interaction with HAX1 and the
Arp2/3 complex (PubMed:<a href="http://w
ww.uniprot.org/citations/26997484"
target="_blank">26997484).

Cellular Location

Cell membrane; Multi-pass membrane
protein. Cell junction, synapse, presynaptic
cell membrane

{ECO:0000250|UniProtKB:Q63959};

Multi-pass membrane protein. Perikaryon

{ECO:0000250|UniProtKB:Q63959}. Cell
projection, axon

{ECO:0000250|UniProtKB:Q63959}. Cell

projection, dendrite

{ECO:0000250|UniProtKB:Q63959}. Cell

projection, dendritic spine membrane

{ECO:0000250|UniProtKB:Q01956};

Multi-pass membrane protein. Cytoplasm,
cell cortex. Cytoplasm, cytoskeleton.

Note=Detected on Purkinje cell dendritic
spines, positioned perisynaptically but also
in extrasynaptic positions along the spine
membranes (By similarity). Detected at
presynaptic calices of Held (By similarity).

Colocalizes with the cortical actin
cytoskeleton and the Arp2/3 complex
(PubMed:26997484)

{ECO:0000250|UniProtKB:Q01956,

ECO:0000250|UniProtKB:Q63959,

ECO:0000269|PubMed:26997484}

KCNC3 Antibody (C-term) - Protocols

Provided below are standard protocols that you
may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)