10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KCNC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14545b

Specification

KCNC1 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P48547
Other Accession	P15388, NP_004967.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**57942**
Antigen Region	**479-508**

KCNC1 Antibody (C-term) - Additional Information

Gene ID 3746

Other Names
Potassium voltage-gated channel subfamily C member 1, NGK2, Voltage-gated potassium channel subunit Kv31, Voltage-gated potassium channel subunit Kv4, KCNC1

Target/Specificity
This KCNC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 479-508 amino acids from the C-terminal region of human KCNC1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

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
KCNC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNC1 Antibody (C-term) - Protein Information

Name KCNC1

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 (PubMed:25401298). 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.

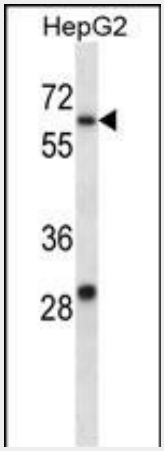
Cellular Location
Cell membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P25122}. Presynaptic cell membrane {ECO:0000250|UniProtKB:P25122}. Note=Localizes in parallel fiber membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones. {ECO:0000250|UniProtKB:P25122}

KCNC1 Antibody (C-term) - Protocols

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

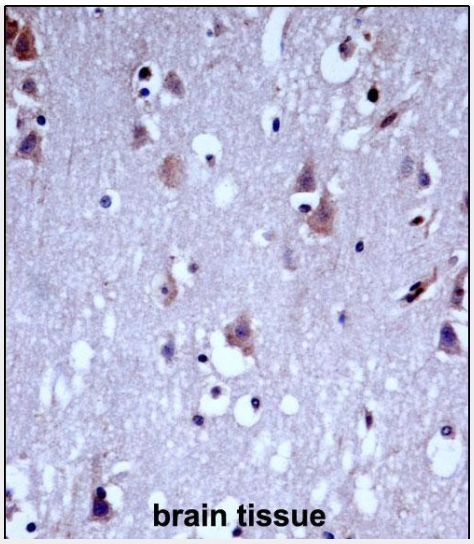
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KCNC1 Antibody (C-term) - Images



KCNC1 Antibody (C-term) (Cat. #AP14545b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the KCNC1 antibody detected the KCNC1 protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



KCNC1 Antibody (C-term) (AP14545b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KCNC1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

KCNC1 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. Multiple transcript variants encoding different isoforms have been inferred for this gene based on orthologous loci.

KCNC1 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Wang, Z., et al. J. Gen. Physiol. 133(4):361-374(2009)
Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005)
Devaux, J., et al. J. Neurosci. 23(11):4509-4518(2003)