

KCNK18 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13619C**Specification**

KCNK18 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q7Z418
Other Accession	NP_862823.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43671
Antigen Region	168-197

KCNK18 Antibody (Center) - Additional Information**Gene ID** 338567**Other Names**

Potassium channel subfamily K member 18, TWIK-related individual potassium channel, TWIK-related spinal cord potassium channel, KCNK18, TRESK, TRIK

Target/Specificity

This KCNK18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-197 amino acids from the Central region of human KCNK18.

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

KCNK18 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNK18 Antibody (Center) - Protein Information**Name** KCNK18

Synonyms TRESK, TRIK

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 (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

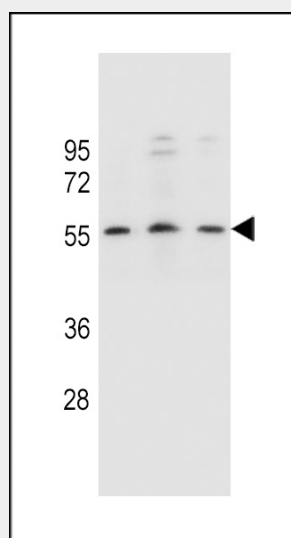
Tissue Location

Expressed specifically in dorsal root ganglion and trigeminal ganglion neurons. Detected at low levels in spinal cord

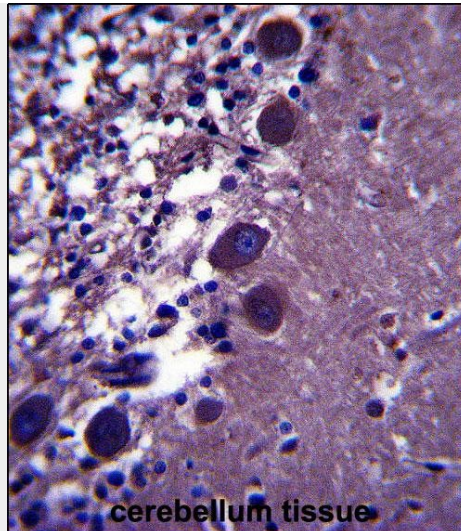
KCNK18 Antibody (Center) - Protocols

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](#)

KCNK18 Antibody (Center) - Images

KCNK18 Antibody (Center) (Cat. #AP13619c) western blot analysis in SiHa, U251, MCF-7 cell line lysates (35ug/lane). This demonstrates the KCNK18 antibody detected the KCNK18 protein (arrow).



KCNK18 Antibody (Center) (Cat. #AP13619c) immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of KCNK18 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

KCNK18 Antibody (Center) - Background

Two-pore domain potassium channels, such as KCNK18, give rise to background, or leak, potassium conductance, and they regulate diverse cellular functions by adjusting both the resting membrane potential and excitability. KCNK18 is unique among this family of potassium channels in that its activity is regulated by intracellular calcium (summary by Czirjak and Enyedi, 2006 [PubMed 16569637]).

KCNK18 Antibody (Center) - References

Lafreniere, R.G., et al. Nat. Med. 16(10):1157-1160(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Egenberger, B., et al. Biochem. Biophys. Res. Commun. 391(2):1262-1267(2010)
Pottosin, I.I., et al. Pflugers Arch. 456(6):1037-1048(2008)
Czirjak, G., et al. J. Biol. Chem. 283(23):15672-15680(2008)