

## KCNK18 / TRESK Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS13802

## **Specification**

## KCNK18 / TRESK Antibody (Internal) - Product Information

Application IF, WB Primary Accession O7Z418

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 44kDa KDa

#### KCNK18 / TRESK Antibody (Internal) - 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**

Human KCNK18

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

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

## KCNK18 / TRESK Antibody (Internal) - 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**

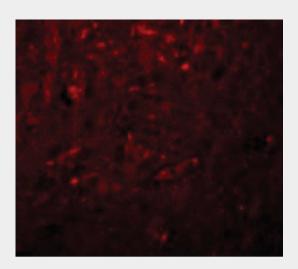
Expressed specifically in dorsal root ganglion and trigeminal ganglion neurons. Detected at low levels in spinal cord

# KCNK18 / TRESK Antibody (Internal) - Protocols

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

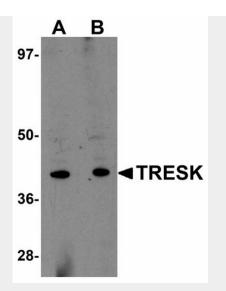
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# KCNK18 / TRESK Antibody (Internal) - Images



Immunofluorescence of TRESK in Rat Brain cells with TRESK antibody at 20 ug/ml.





Western blot of TRESK in rat brain tissue lysate with TRESK antibody at (A) 1 and (B) 2 ug/ml.

#### KCNK18 / TRESK Antibody (Internal) - Background

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# KCNK18 / TRESK Antibody (Internal) - References

Sano Y.,et al.J. Biol. Chem. 278:27406-27412(2003).
Deloukas P.,et al.Nature 429:375-381(2004).
Liu C.,et al.Anesth. Analg. 99:1715-1722(2004).
Dobler T.,et al.J. Physiol. (Lond.) 585:867-879(2007).
Egenberger B.,et al.Biochem. Biophys. Res. Commun. 391:1262-1267(2010).