

**KCNK12 Antibody**  
**Catalog # ASC11355****Specification**

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**KCNK12 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q9HB15</a>
Other Accession	<a href="#">NP_071338</a> , <a href="#">11545761</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	KCNK12 antibody can be used for detection of KCNK12 by Western blot at 0.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

**KCNK12 Antibody - Additional Information**

Gene ID 56660

**Target/Specificity**

KCNK12; KCNK12 antibody is predicted to not cross-react with other KCNK protein family members.

**Reconstitution & Storage**

KCNK12 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

KCNK12 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**KCNK12 Antibody - Protein Information****Name** KCNK12**Function**

Probable potassium channel subunit. No channel activity observed in heterologous systems. May need to associate with another protein to form a functional channel (By similarity).

**Cellular Location**

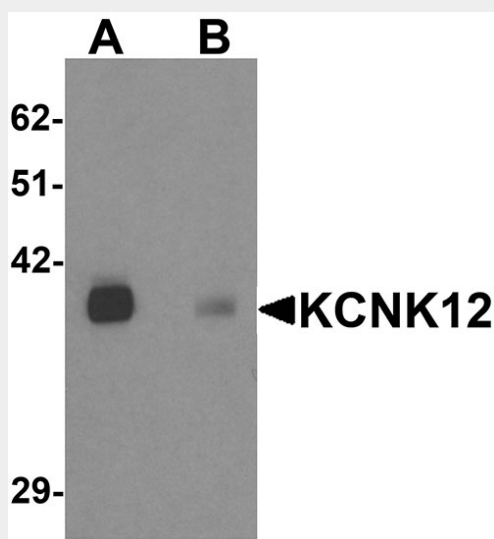
Membrane; Multi-pass membrane protein

**KCNK12 Antibody - Protocols**

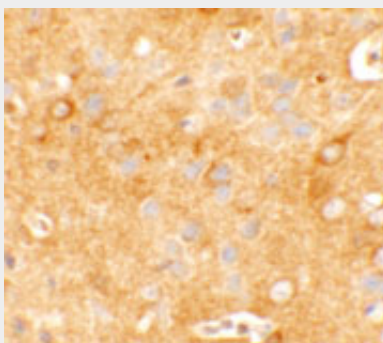
Provided below are standard protocols that you may find useful for product applications.

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

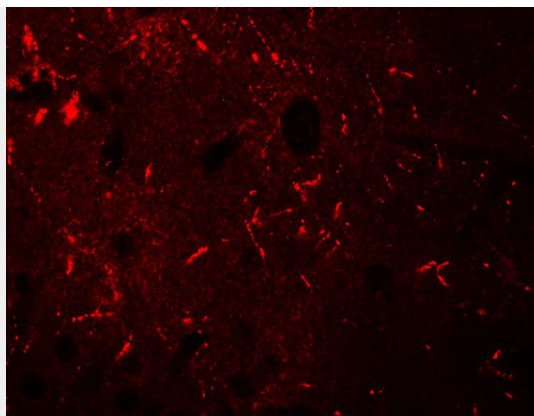
#### KCNK12 Antibody - Images



Western blot analysis of KCNK12 in rat brain tissue lysate with KCNK12 antibody at 0.5  $\mu\text{g/mL}$  in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of KCNK12 in mouse brain tissue with KCNK12 antibody at 5  $\mu\text{g/mL}$ .



Immunofluorescence of KCNK12 in mouse brain tissue with KCNK12 antibody at 20 µg/mL.

### **KCNK12 Antibody - Background**

KCNK12 Antibody: KCNK13 and KCNK12 (also known as THIK1 and 2) are the first two members of a novel two pore-forming P domains K<sup>+</sup> channels subfamily. The pore loop domain, a highly conserved region common to all potassium channels, is involved in determining potassium ion selectivity. Members of this family are all characterized by four transmembrane domains and may function to help influence the resting membrane potential of cells. KCNK12 is expressed mainly in the brain and lung, but also observed in the kidneys, heart and skeletal muscle. KCNK12 is closely related to KCNK13 (58% identity at the amino acid level), but could not yet been functionally expressed in vitro and may require other proteins to become active.

### **KCNK12 Antibody - References**

Rajan S, Wischmeyer E, Karschin C, et al. THIK-1 and THIK-2, a novel subfamily of tandem pore domain K<sup>+</sup> channels. J. Biol. Chem. 2001; 276:7302-11  
Jezzini SH and Moroz LL. Identification and distribution of a twopore domain potassium channel in the CNS of Aplysia californica. Brain Res. Mol. Brain Res. 2004; 127:27-38  
Theilig F, Goranova I, Hirsch JR, et al. Cellular localization of THIK-1 (K(2P)13.1) and THIK-2 (K(2P)12.1) K channels in the mammalian kidney. Cell Physiol. Biochem. 2008; 21:63-74.  
Girard C, Duprat F, Terrenoire C, et al. Genomic and functional characteristics of novel human pancreatic 2P domain K<sup>+</sup> channels. Biochem. Biophys. Res. Commun. 2001; 282:249-56.