

**KCNN1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP56464**

**Specification**

**KCNN1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q92952</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KCNN1
Epitope Specificity	401-500/543
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane.
SIMILARITY	Belongs to the potassium channel KCNN family. KCa2.1/KCNN1 subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

Action potentials in vertebrate neurons are followed by an afterhyperpolarization (AHP) that may persist for several seconds and may have profound consequences for the firing pattern of the neuron. Each component of the AHP is kinetically distinct and is mediated by different calcium-activated potassium channels. The protein encoded by this gene is activated before membrane hyperpolarization and is thought to regulate neuronal excitability by contributing to the slow component of synaptic AHP. The encoded protein is an integral membrane protein that forms a voltage-independent calcium-activated channel with three other calmodulin-binding subunits. This gene is a member of the KCNN family of potassium channel genes. [provided by RefSeq, Jul 2008]

**KCNN1 Polyclonal Antibody - Additional Information**

**Gene ID** 3780

**Other Names**

Small conductance calcium-activated potassium channel protein 1, SK1, SKCa 1, SKCa1, KCa2.1, KCNN1, SK

**Dilution**

<span class = "dilution\_WB">WB~1:1000</span><br \><span class

=["dilution\\_IHC-P">IHC-P](#)~N/A</span><br \><span class  
=["dilution\\_IHC-F">IHC-F](#)~N/A</span><br \><span class  
=["dilution\\_IF">IF](#)~1:50~200</span><br \><span class =["dilution\\_ICC">ICC](#)~N/A</span><br  
\><span class =["dilution\\_E">E](#)~N/A</span>

### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## KCNN1 Polyclonal Antibody - Protein Information

**Name** KCNN1 {ECO:0000303|PubMed:10516439, ECO:0000312|HGNC:HGNC:6290}

### Function

Small conductance calcium-activated potassium channel that mediates the voltage-independent transmembrane transfer of potassium across the cell membrane through a constitutive interaction with calmodulin which binds the intracellular calcium allowing its opening (PubMed:<a href="http://www.uniprot.org/citations/17142458" target="\_blank">17142458</a>, PubMed:<a href="http://www.uniprot.org/citations/8781233" target="\_blank">8781233</a>, PubMed:<a href="http://www.uniprot.org/citations/9287325" target="\_blank">9287325</a>). The current is characterized by a voltage-independent activation, an intracellular calcium concentration increase-dependent activation and a single- channel conductance of about 3 picosiemens (PubMed:<a href="http://www.uniprot.org/citations/8781233" target="\_blank">8781233</a>). Also presents an inwardly rectifying current, thus reducing its already small outward conductance of potassium ions, which is particularly the case when the membrane potential displays positive values, above + 20 mV (Probable). Activation is followed by membrane hyperpolarization (By similarity). Thought to regulate neuronal excitability by contributing to the slow component of synaptic afterhyperpolarization (By similarity).

### Cellular Location

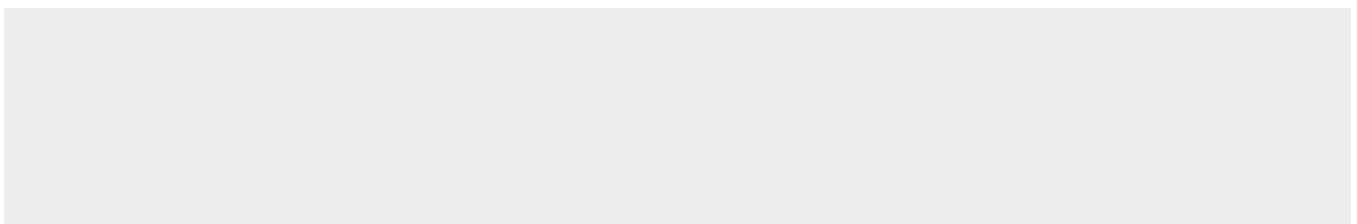
Membrane; Multi-pass membrane protein. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250|UniProtKB:Q9EQR3}

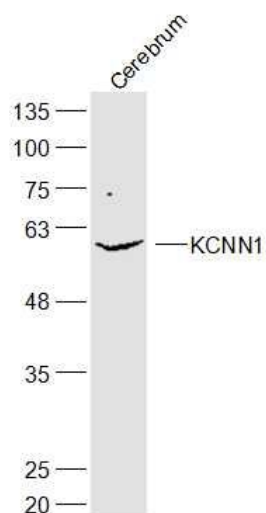
## KCNN1 Polyclonal Antibody - Protocols

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](#)

## KCNN1 Polyclonal Antibody - Images





**Sample:**

Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-KCNN1 (bs-16910R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD