

**Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody**  
**Affinity purified rabbit polyclonal antibody**  
**Catalog # AN1063**

**Specification**

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**Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q63099</a>
Reactivity	Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	100 KDa

**Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody - Additional Information**

Gene ID	621349
Gene Name	KCNB2

**Other Names**

Potassium voltage-gated channel subfamily B member 2, CDRK, Voltage-gated potassium channel subunit Kv22, Kcnb2

**Target/Specificity**

Synthetic peptide corresponding to amino acid residues specific to the Kv2.2 subunit conjugated to KLH.

**Dilution**

WB~~ 1:1000

**Format**

Prepared from rabbit serum by affinity purification using a Sulfo-Link® column matrix to which the peptide immunogen was coupled.

**Antibody Specificity**

Specific for the ~125k voltage gated potassium channel, Kv 2.2 subunit.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

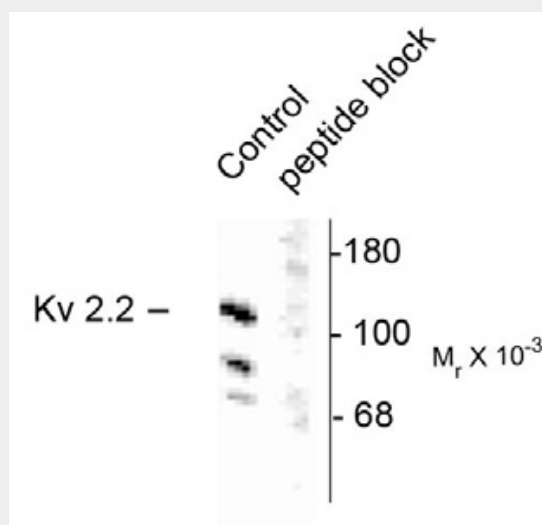
Blue Ice

**Voltage Gated Potassium Channel, Kv2.2 Subunit 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](#)

### **Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody - Images**



Western blot of rat brain homogenate showing specific immunolabeling of the ~125k voltage-gated potassium channel, Kv2.2 (Control). The immunolabeling is blocked by preadsorption with the peptide used as antigen (Peptide block).

### **Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody - Background**

Voltage-gated K<sup>+</sup> channels are important determinants of neuronal membrane excitability (Pongs, 1999). Moreover, differences in K<sup>+</sup> channel expression patterns and densities contribute to the variations in action potential waveforms and repetitive firing patterns evident in different neuronal cell types. The delayed rectifier-type (IK) channels (Kv1.5, Kv2.1, and Kv2.2) are expressed on all neuronal somata and proximal dendrites and are also found in a wide variety of non-neuronal cells types including pancreatic islets, alveolar cells and cardiac myocytes (Hwang et al., 1993; Yan et al., 2004; Michaelievski et al., 2003). Kv2.1 and Kv2.2 form distinct populations of K<sup>+</sup> channels and these subunits are thought to be primarily responsible for IK in superior cervical ganglion cells (Blaine and Ribera, 1998; Burger and Ribera, 1996).

### **Voltage Gated Potassium Channel, Kv2.2 Subunit Antibody - References**

- Blaine JT, Ribera AB (1998) Heteromultimeric potassium channels formed by members of the Kv2 subfamily. *J Neurosci* 18:9585-9593.
- Burger C, Ribera AB (1996) Xenopus spinal neurons express Kv2 potassium channel transcripts during embryonic development. *J Neurosci* 16:1412-1421.
- Hwang PM, Fotuhi M, Bret D, Cunningham AM, Snyder SH (1993) Contrasting immunohistochemical localizations in rat brain of two novel K<sup>+</sup> channels of the Shab subfamily. *J Neurosci* 13:1569-1576.
- Michaelievski I, Chikvashvili D, Tsuk S, Singer-Lahat D, Kang YH, Linial M, Gaisano HY, Fili O, Lotan I

(2003) Direct interaction of target SNAREs with the Kv2.1 channel - Modal regulation of channel activation and inactivation gating. J Biol Chem 278:34320-34330.

Pongs O (1999) Voltage-gated potassium channels: from hyperexcitability to excitement. FEBS Lett 452:31-35.

Yan L, Figueroa DJ, Austin CP, Liu Y, Bugianesi RM, Slaughter RS, Kaczorowski GJ, Kohler MG (2004) Expression of voltage-gated potassium channels in human and rhesus pancreatic islets. Diabetes 53:597-607.

D. Guan, T. Tkatch, D. J. Surmeier, W. E. Armstrong, and R. C. Foehring (2007) Kv2 subunits underlie slowly inactivating potassium current in rat neocortical pyramidal neurons J. Physiol., Jun 2007; 581: 941 - 960.