

**KCND1 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13021a****Specification**

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**KCND1 Antibody (N-term) Blocking peptide - Product Information**

Primary Accession [Q9NSA2](#)

**KCND1 Antibody (N-term) Blocking peptide - Additional Information**

**Gene ID** 3750

**Other Names**

Potassium voltage-gated channel subfamily D member 1, Voltage-gated potassium channel subunit Kv41, KCND1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**KCND1 Antibody (N-term) Blocking peptide - Protein Information**

**Name** KCND1

**Function**

Pore-forming (alpha) subunit of voltage-gated rapidly inactivating A-type potassium channels. May contribute to I(To) current in heart and I(Sa) current in neurons. Channel properties are modulated by interactions with other alpha subunits and with regulatory subunits.

**Cellular Location**

Membrane; Multi-pass membrane protein. Cell projection, dendrite

**Tissue Location**

Widely expressed. Highly expressed in brain, in particular in cerebellum and thalamus; detected at lower levels in the other parts of the brain.

**KCND1 Antibody (N-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **KCND1 Antibody (N-term) Blocking peptide - Images**

#### **KCND1 Antibody (N-term) Blocking peptide - Background**

Voltage-gated potassium (Kv) channels represent the most complex class of voltage-gated ion channels from both functional and structural standpoints. Their diverse functions include regulating neurotransmitter release, heart rate, insulin secretion, neuronal excitability, epithelial electrolyte transport, smooth muscle contraction, and cell volume. Four sequence-related potassium channel genes - shaker, shaw, shab, and shal - have been identified in *Drosophila*, and each has been shown to have a human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shal-related subfamily, members of which form voltage-activated A-type potassium ion channels and are prominent in the repolarization phase of the action potential. This gene is expressed at moderate levels in all tissues analyzed, with lower levels in skeletal muscle.

#### **KCND1 Antibody (N-term) Blocking peptide - References**

Jang, S.H., et al. Biochem. Biophys. Res. Commun. 384(2):180-186(2009) Gutman, G.A., et al. Pharmacol. Rev. 57(4):473-508(2005) Jerng, H.H., et al. Biophys. J. 87(4):2380-2396(2004) Nakamura, T.Y., et al. FEBS Lett. 499(3):205-209(2001) Isbrandt, D., et al. Genomics 64(2):144-154(2000)