



Kv2.1 (DRK1, Kcnb1, Voltage-gated Potassium Channel)

Catalog number

K9005-10

Supplier

United States Biological

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 human homolog(s). This gene encodes a member of the potassium channel, voltage-gated, shab-related subfamily. This member is a delayed rectifier potassium channel and its activity is modulated by some other family members.

Applications

Suitable for use in Western Blot and Immunohistochemistry. Other applications not tested.

Recommended Dilution

Western Blot: 1:250-1:500. Rat brain membranes
Immunohistochemistry: Rat brain sections.
Optimal dilutions to be determined by the researcher.

Positive Control Antigen

K9005-10P

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Synthetic peptide corresponding to aa837-853, (CY)HML PGGGA HGSTR DQS of rat Kv2.1. Cellular Localization: Intracellular, C-terminus. Species Sequence Homology: Mouse-100%, human and rabbit-15/17.

Formulation

Supplied as a liquid in PBS, pH 7.4, 1% BSA, 5% sucrose, 0.025% sodium azide.

Purity

Purified by Protein A affinity chromatography.

Specificity

Recognizes rat Kv2.1.

Product Type



Pab

Source

rat

Isotype

IgG

Grade

Affinity Purified

Applications

IHC WB

Crossreactivity

Rt

Storage

-20°C

Reference

1. Yamashita, T., et al. (2000) Circulation 101, 2007. 2. Betancourt, L., and Colom, L.V. (2000) J. Neurosci. Res. 61,646.