

Datasheet for 612-401-E13**Potassium Channel, Voltage Gated, Kv2.2 Antibody****Overview**

Description:	Anti-Potassium Channel, Voltage Gated, Kv2.2 (RABBIT) Antibody - 612-401-E13
Item No.:	612-401-E13
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Rat
Host Species:	Rabbit

Product Details

Background:	Potassium Channel, Voltage Gated Kv2.2 Antibody detects Voltage Gated Potassium Channel Kv2.2. Voltage-gated K ⁺ channels are important determinants of neuronal membrane excitability. Moreover, differences in K ⁺ 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. Kv2.1 and Kv2.2 form distinct populations of K ⁺ channels and these subunits are thought to be primarily responsible for IK in superior cervical ganglion cells. Anti-Potassium Channel, Voltage Gated Kv2.2 Antibody is ideal for investigators involved in Neuroscience and Cell Signaling research.
Synonyms:	Potassium voltage-gated channel subfamily B member 2, CDRK
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Kcnb2
Reactivity:	Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Potassium Channel, Voltage Gated Kv2.2 Antibody was produced by repeated immunizations with a synthetic peptide corresponding to amino acid residues specific to the Kv2.2 subunit.
Purity/Specificity:	Anti-Potassium Channel, Voltage Gated Kv2.2 antibody is directed against rat Voltage Gated Potassium Channel Kv2.2. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Cross reactivity with Kv2.2 from other species has not been determined.
Relevant Links:	• UniProtKB - Q63099 • GeneID - 621349 • NCBI - NP_446452.2

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Potassium Channel, Voltage Gated, Kv2.2 Antibody has been tested in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 100 kDa in size corresponding to voltage gated potassium channel, Kv2.2 subunit in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:1000
WB:	1:1000

Formulation

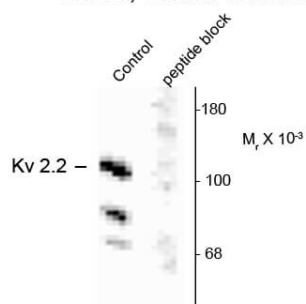
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

Anti-Potassium Channel, Voltage Gated, Kv2.2 Subunit



Western blot of rat brain homogenate showing specific immunolabeling of the ~125k voltage-gated potassium channel, Kv2.2-subunit.

Western Blot

Western Blot of Rabbit anti-Potassium Channel, Voltage Gated, Kv2.2 antibody. Lane 1: Rat brain homogenate showing specific immunolabeling of the ~125k voltage-gated potassium channel, Kv2.2 (Control). Lane 2: The immunolabeling is blocked by preadsorption with the peptide used as antigen (Peptide block). Load: 10 µg per lane. Primary antibody: Potassium Channel, Voltage Gated, Kv2.2 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 125 kDa for Potassium Channel, Voltage Gated, Kv2.2. Other band(s): Potassium Channel, Voltage Gated, Kv2.2 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.