

Anti-Kv2.1 (MOUSE) Monoclonal Antibody - 200-301-F98

Code: 200-301-F98 Size: 100 µg

Product Description: Anti-Kv2.1 (MOUSE) Monoclonal Antibody - 200-301-F98

Concentration: 1mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label Unconjugated

Host Mouse

Gene Name Kcnb1

Species Reactivity Human, Mouse, Rat

Buffer 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer 50% (v/v) Glycerol

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to

immediate use.

Synonyms Shab, Kv2.1, DRK1PC, Kcr1-1, Kcnb1, Potassium voltage-gated channel subfamily B member 1, Delayed

rectifier potassium channel 1, DRK1, Voltage-gated potassium channel subunit Kv2.1

Application Note Anti-Kv2.1 Antibody is suitable for use in WB, IP, and IHC. Expect a band approximately ~105-125kDa on

specific lysates (varies with cell background due to phosphorylation). Specific conditions for reactivity should be

optimized by the end user.

Background Voltage gated channels are tetrameters composed of four alpha-subunits arranged around a central pore. Each

alphasubunit consists of six transmembrane segments with cytoplasmic NH2 and COOH-termini. Members of the KV1- KV4 subfamilies generate functional K+ channels in a homotetrameric configuration. The KV2 subfamily consists of KV2.1 and KV2.2, and both have very similar properties. Members of the KV2 subfamily are widely expressed in neuronal tissues. They have also been reported in neurons in

the dorsal root ganglia.

Purity And Specificity

Anti-Kv2.1 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Kv2.1 from Mouse, Human, and Rat based on 100% homology with the immunizing sequence. No crossreactivity to rat Kv2.2. Cross-reactivity with Kv2.1 from other sources has not been determined. Ion

Channels research.

0.1-1.0ug/mL Immunohistochemistry

WESTERN BLOT 1ug/mL

IHC 0.1-1.0ug/mL **IFMICROSCOPY** 1.0-10ug/mL

Kv2.1 Antibody was produced in mice by repeated immunizations raised against a synthetic peptide **Immunogen**

corresponding to the cytoplamsic C-terminus region of rat KV2.1.

General Reference 1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.: Sunderland, MA

USA.

2. www.iochannels.org 3. Bocksteins E., et al. (2009) Am J Physiol. 296:C1271-C1278. 4. Ishikawa K, Tanaka M, Black J.A., and Wasman S.G. (1999)

Muscle Nerve 22: 502-507.

5. Kim D.S., Choi J.O., Rim H.D., and Cho H.J. (2002) Brain Res

Mol Brain Res. 105: 146-152.

Related Products

100-401-223 Anti-Gli1 (RABBIT) Antibody - 100-401-223

100-401-408 Anti-NOTCH 2 (Cleaved N terminal) (Human specific) (RABBIT)

Antibody - 100-401-408

611-1302 Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated

- 611-1302

Related Links

NCBI - NP_037318 http://www.ncbi.nlm.nih.gov/protein/NP_037318

Gene ID - 25736 http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&term=25736

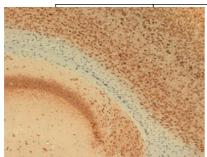
UniProtKB -P15387

http://www.uniprot.org/uniprot/P15387

Images

1 Immunohistochemistry of mouse anti-Kv2.1 antibody. Tissue: Mouse Brain hippocampus. Primary Antibody: Kv2.1 antibody at 1 μg/mL for 1h at RT. Secondary antibody: Peroxidase mouse secondary at 1:10,000 for 45 min at RT. Localization: membrane.

Staining: Kv2.1 as brown signal.



Western Blot of mouse anti-Kv2.1 antibody. Lane 1: Rat Brain Membrane Tissue.Primary antibody: Kv2.1 antibody at 1:1000 for overnight at 4°C.Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 95.6 kDa/105-125kDa (varies with cell benderated due to benderate at the control of the secondary and the secondary a 2

(varies with cell background due to phosphorylation). Other

band(s): none.



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.