Datasheet for ABIN7043479

anti-KCNJ2 antibody (Intracellular)

2 Images

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Overview

Quantity:	25 µL
Target:	KCNJ2
Binding Specificity:	AA 392-410, Intracellular
Reactivity:	Human
Host:	Guinea Pig
Clonality:	Polyclonal
Conjugate:	This KCNJ2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Guinea Pig Polyclonal Antibody to Kir2.1 (KCNJ2) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)NGVPESTSTDTPPDIDLHN, corresponding to amino acid residues 392-410 of human Kir2.1
Isotype:	IgG
Specificity:	Intracellular, C-terminal domain
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	chicken - 15,guinea pig - identical, rat,Rabbit,bovine,19 amino acid residues identical,mouse - 17,pig
Characteristics:	Guinea pig Anti-Kir2.1/KCNJ2 Antibody is directed against an epitope of the human Kir2.1

Product Details

	channel. Guinea pig Anti-Kir2.1/KCNJ2 Antibody raised in guinea pig can be used in western blot analysis. It was designed to recognize Kir2.1 from human, rat and mouse samples. The antigen used to immunize guinea pigs is the same as Anti-Kir2.1/KCNJ2 Antibody (ABIN7043480, ABIN7044934 and ABIN7044935) raised in rabbit. Our line of guinea pig antibodies enables more flexibility with our products such as multiplex staining studies, immunoprecipitation, etc.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	KCNJ2
Alternative Name:	KCNJ2 (KCNJ2 Products)
Background:	Inward rectifier potassium channel 2, IRK1, HIRK1, LQT7, SQT3,Kir2.1 is a member of the family of inward rectifying K+ channels. The family includes 15 members that are structurally and functionally different from the voltage-dependent K+ channels.1 The family's topology consists of two transmembrane domains that flank a single and highly conserved pore region with intracellular N- and C-termini. As is the case for the voltage-dependent K+ channels the functional unit for the Kir channels is composed of four subunits that can assemble as either homo- or heterotetramers.Kir channels are characterized by a K+ efflux that is limited by depolarizing membrane potentials thus making them essential for controlling resting membrane potential and K+ homeostasis.Kir2.1 is a member of the Kir2.x subfamily that includes four members (Kir2.1- Kir2.4) that are characterized by strong inward rectification and high constitutive activity.Kir2.1 is expressed in a variety of tissues including the heart, brain, vascular smooth muscle cells and skeletal muscles.In the heart, Kir2.1 is a molecular component of the IK1 current that is responsible for setting the resting membrane potential, preventing membrane hyperpolarization due to Na+ pump activity, influencing propagation velocity, altering the electrical space constant, and promoting late phase repolarization.2 In fact, mutations in Kir2.1 channels have been linked to a form of long QT syndrome (LQT7) known as Andersen's syndrome that is characterized by cardiac arrhythmias, periodic paralysis, and dysmorphic features.3 Alternative names: Kir2.1 (KCNJ2), Inward rectifier potassium channel 2, IRK1, HIRK1, LQT7, SQT3
Gene ID:	3759

Target Details

NCBI Accession:	NM_000891
UniProt:	P48049

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:500
Comment:	Cited Application: ICC Negative Control: (ABIN7236387) Blocking Peptide: (ABIN7236387)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

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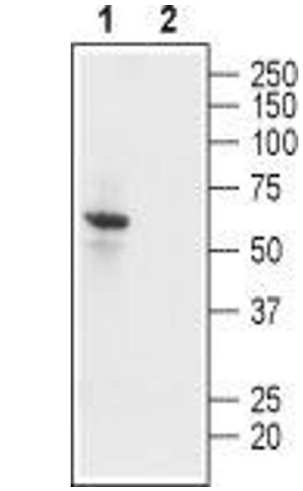
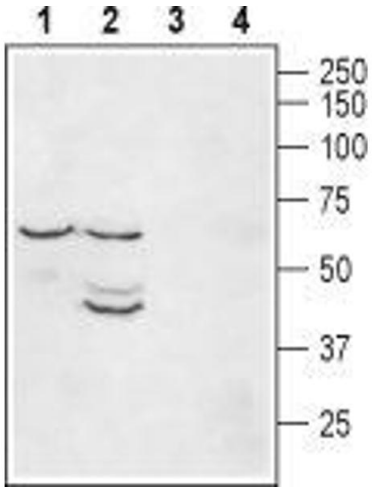


Western Blotting

Image 1. Western blot analysis of human U-87 MG glioblastoma cell lysate: - 1. Guinea pig Anti-Kir2.1/KCNJ2 Antibody (ABIN7043479, ABIN7045398 and ABIN7045399), (1:500).2. Guinea pig Anti-Kir2.1/KCNJ2 Antibody, preincubated with Kir2.1/KCNJ2 Blocking Peptide (#BLP-PC026).



Western Blotting

Image 2. Western blot analysis of mouse heart lysate (lanes 1 and 3) and rat brain membranes (lanes 2 and 4): - 1-2. Guinea pig Anti-Kir2.1/KCNJ2 Antibody (ABIN7043479, ABIN7045398 and ABIN7045399), (1:500).3-4. Guinea pig Anti-Kir2.1/KCNJ2 Antibody, preincubated with Kir2.1/KCNJ2 Blocking Peptide (#BLP-PC026).