Datasheet for ABIN7043482

anti-KCNJ2 antibody (Extracellular) (FITC)

2 Images

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Overview

Quantity:	50 µL
Target:	KCNJ2
Binding Specificity:	AA 112-125, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNJ2 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Kir2.1 Conjugated to the Fluorescent Dye FITC
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)DLDASKESKA(S)VSE, corresponding to amino acid residues 112-125 of rat Kir2.1
Isotype:	IgG
Specificity:	Extracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	mouse - 11,14 amino acid residues identical,Rat,pig - 13, human - 12,dog
Characteristics:	Anti-Kir2.1/KCNJ2 (extracellular) Antibody (ABIN7043481, ABIN7045056 and ABIN7045057) is a highly specific antibody directed against an epitope of the rat protein. The antibody can be

Product Details

	used in western blot, live cell imaging and live cell flow cytometry. It has been designed to recognize Kir2.1 from human, rat, and mouse samples. \nAnti-Kir2.1/KCNJ2 (extracellular)-FITC Antibody (ABIN7043481, ABIN7045056 and ABIN7045057)-F) is directly conjugated to fluorescein isothiocyanate (FITC). The antibody can be used in immunofluorescent applications such as direct live cell flow cytometry.
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,Inwardly rectifying K+ (Kir) channels allow K+ to move more easily in, rather than out, of the cell. They have diverse physiological functions depending on their type and their location. There are seven Kir channel subfamilies that can be classified into four functional groups.Kir2.1 belongs to the Kir2.x subfamily. The primary structure of Kir2.1 is comprised of two putative membrane-spanning domains (TM1 and TM2) linked by an extracellular pore-forming region (H5) and cytoplasmic amino and carboxy terminal domains. The H5 region serves as the "ion-selectivity filter" that is shared with other K+-selective ion channels with the signature sequence T-X-G-Y(F)-G.Although initially thought to form only homomeric complexes, it is now known that Kir2.1 can function as a heterotetramer with other Kir2.x subunits both in vitro and in vivo. After synthesis in the endoplasmic reticulum, Kir2.1 is transported to the Golgi apparatus for post-translational modification, and then transported to the cell surface. Sequences in the NH2-terminal region have been identified as responsible for Golgi export.Kir2.1 is expressed in skeletal and cardiac muscle and contributes to the establishment of highly negative resting potential and long-lasting action potential plateau in various cells including cardiac myocytes. Inward rectification of Kir2.1 is caused by intracellular ions such as Mg2+ and polyamines.Andersen syndrome is caused by dysfunction of Kir2.1. Patients with Andersen syndrome exhibit cardiac arrhythmias reminiscent of long Q-T syndrome, periodic paralysis, and dysmorphic bone structure in the face and fingers. Alternative names: Inward rectifier potassium channel 2, IRK1, HIRK1, LQT7, SQT3
Gene ID:	29712
NCBI Accession:	NM_000891

Target Details

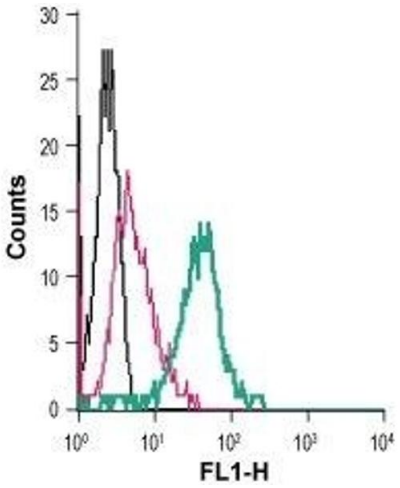
UniProt:	Q64273

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: N/A
Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7236391)
Restrictions:	For Research Use only

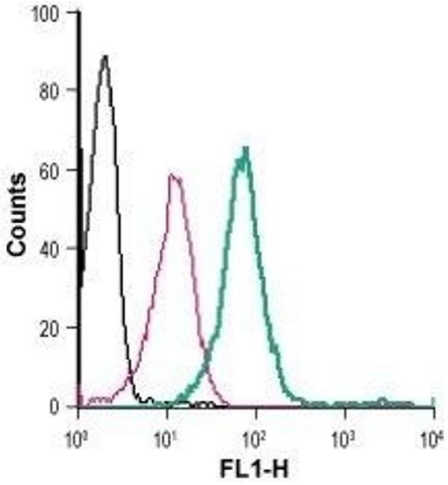
Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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, protected from the light, 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).



Flow Cytometry

Image 1. Cell surface detection of Kir2.1 in live intact mouse J774 macrophage cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Kir2.1/KCNJ2 (extracellular)-FITC Antibody (ABIN7043482, ABIN7045654, ABIN7045655, ABIN7045656 and ABIN7045657), (2.5 µg).



Flow Cytometry

Image 2. Cell surface detection of Kir2.1 in live intact human THP-1 monocytic leukemia cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-Kir2.1/KCNJ2 (extracellular)-FITC Antibody (ABIN7043482, ABIN7045654, ABIN7045655, ABIN7045656 and ABIN7045657), (2.5 µg).