Datasheet for ABIN7043476

anti-KCNJ13 antibody (Extracellular) (Atto 488)

1 Image

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Overview

Quantity:	50 µL
Target:	KCNJ13
Binding Specificity:	AA 80-94, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNJ13 antibody is conjugated to Atto 488
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Kir7.1 Channel Conjugated to the Fluorescent Dye ATTO-488
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)EMNGDLEIDHDVPPE, corresponding to amino acid residues 80-94 of rat KCNJ13
Isotype:	IgG
Specificity:	Extracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 13,15 amino acid residues identical
Characteristics:	Anti-Kir7.1 (extracellular) Antibody (ABIN7043475, ABIN7045027 and ABIN7045028) is a highly specific antibody directed against an extracellular epitope of the rat protein. The antibody can

Product Details

	be used in western blot, immunohistochemistry and indirect flow cytometry applications. It has been designed to recognize Kir7.1 from rat, mouse and human samples. \nAnti-Kir7.1 (extracellular)-ATTO Fluor-488 Antibody (ABIN7043476) is directly labeled with an fluorescent dye. ATTO dyes are characterized by strong absorption (high extinction coefficient), high fluorescence quantum yield, and high photo-stability. The label is analogous to the well known dye fluorescein isothiocyanate (FITC) and can be used with filters typically used to detect FITC. Anti-Kir7.1 (extracellular)-ATTO Fluor-488 Antibody is especially suited for experiments requiring simultaneous labeling of different markers.
Purification:	Affinity purified on immobilized antigen.

Target Details

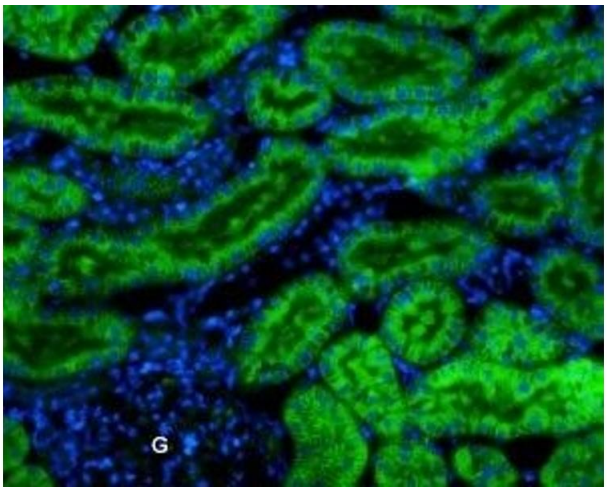
Target:	KCNJ13
Alternative Name:	KCNJ13 (KCNJ13 Products)
Background:	Inward rectifier potassium channel 13, KCNJ13,Kir7.1 (KCNJ13) is a member of the inward rectifying K+ channel family. The family includes 15 members that are structurally and functionally different from the voltage-dependent K+ channels.The family's protein 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 heteromers.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+ homeostasis1.Kir7.1, an inwardly rectifying K+ channel with unusual permeation properties is localized in epithelial cells of the thyroid, small intestine, kidney tubules, choroid plexus and in retinal pigment epithelium (RPE), where it forms a major component of the apical membrane K+ conductance2.A mutation in the gene encoding the channel was found to cause snowflake vitreoretinal degeneration (SVD) which is a developmental and progressive hereditary eye disorder that affects multiple tissues within the eye3. Alternative names: Kir7.1, Inward rectifier potassium channel 13, KCNJ13
Gene ID:	94341
NCBI Accession:	NM_002242
UniProt:	O70617

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:50 Application Dilutions Western blot wb: N/A
Comment:	Cited Application: IHC Negative Control: (ABIN7582041) Blocking Peptide: (ABIN7236376)
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).



Immunohistochemistry

Image 1. Expression of Kir7.1 in rat kidney - Immunohistochemical staining of paraffin-embedded rat kidney sections using Anti-Kir7.1 (extracellular)-ATTO Fluor-488 Antibody (ABIN7043476), (1:50). Kir7.1 staining (green) is present in convoluted tubules in the renal cortex. Glomeruli (G) are negative. Cell nuclei were visualized with Hoechst 33342 (blue).

