

Datasheet for ABIN7163916
anti-KCNK1 antibody (AA 268-336)[Go to Product page](#)

3 Images

Overview

Quantity:	100 µg
Target:	KCNK1
Binding Specificity:	AA 268-336
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KCNK1 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Potassium channel subfamily K member 1 protein (268-336AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	KCNK1
Alternative Name:	KCNK1 (KCNK1 Products)
Background:	Background: Ion channel that contributes to passive transmembrane potassium transport and to the regulation of the resting membrane potential in brain astrocytes, but also in kidney and in

Target Details

other tissues (PubMed:15820677, PubMed:21653227). Forms dimeric channels through which potassium ions pass in accordance with their electrochemical gradient. The channel is selective for K(+) ions at physiological potassium concentrations and at neutral pH, but becomes permeable to Na(+) at subphysiological K(+) levels and upon acidification of the extracellular medium (PubMed:21653227, PubMed:22431633). The homodimer has very low potassium channel activity, when expressed in heterologous systems, and can function as weakly inward rectifying potassium channel (PubMed:8605869, PubMed:8978667, PubMed:15820677, PubMed:21653227, PubMed:22431633, PubMed:23169818, PubMed:25001086). Channel activity is modulated by activation of serotonin receptors (By similarity). Heterodimeric channels containing KCNK1 and KCNK2 have much higher activity, and may represent the predominant form in astrocytes (By similarity). Heterodimeric channels containing KCNK1 and KCNK3 or KCNK9 have much higher activity (PubMed:23169818). Heterodimeric channels formed by KCNK1 and KCNK9 may contribute to halothane-sensitive currents (PubMed:23169818). Mediates outward rectifying potassium currents in dentate gyrus granule cells and contributes to the regulation of their resting membrane potential (By similarity). Contributes to the regulation of action potential firing in dentate gyrus granule cells and down-regulates their intrinsic excitability (By similarity). In astrocytes, the heterodimer formed by KCNK1 and KCNK2 is required for rapid glutamate release in response to activation of G-protein coupled receptors, such as F2R and CNR1 (By similarity). Required for normal ion and water transport in the kidney (By similarity). Contributes to the regulation of the resting membrane potential of pancreatic beta cells (By similarity). The low channel activity of homodimeric KCNK1 may be due to sumoylation (PubMed:15820677, PubMed:20498050, PubMed:23169818). The low channel activity may be due to rapid internalization from the cell membrane and retention in recycling endosomes (PubMed:19959478).

Aliases: DPK antibody, HOHO antibody, HOHO1 antibody, inward rectifying potassium channel protein TWIK 1 antibody, Inward rectifying potassium channel protein TWIK-1 antibody, Inward rectifying potassium channel protein TWIK1 antibody, K2P1 antibody, K2p1.1 antibody, KCNK1 antibody, KCNK1_HUMAN antibody, KCNO1 antibody, OTTHUMP00000036029 antibody, Potassium channel KCNO1 antibody, Potassium channel subfamily K member 1 antibody, Potassium inwardly rectifying channel subfamily K member 1 antibody, TWIK 1 antibody, TWIK1 antibody

UniProt: [000180](#)

Application Details

Application Notes: Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,

Application Details

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4

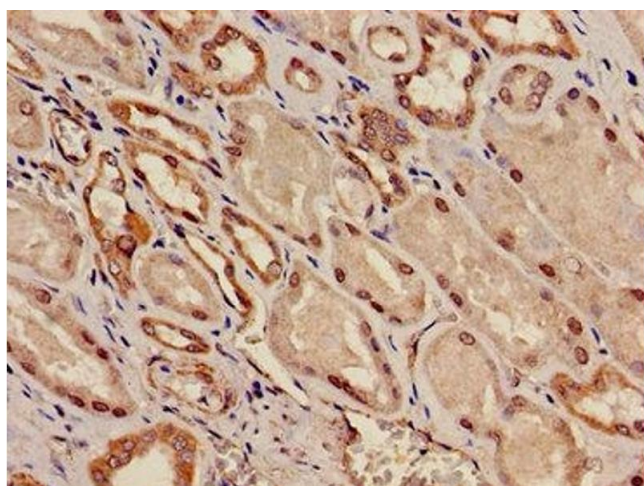
Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C, -80 °C

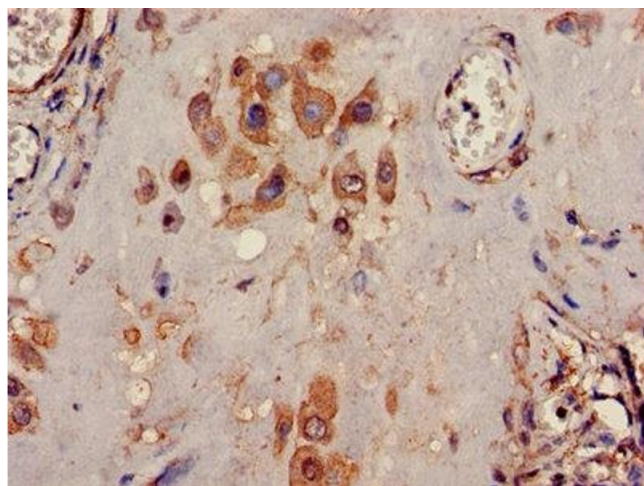
Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



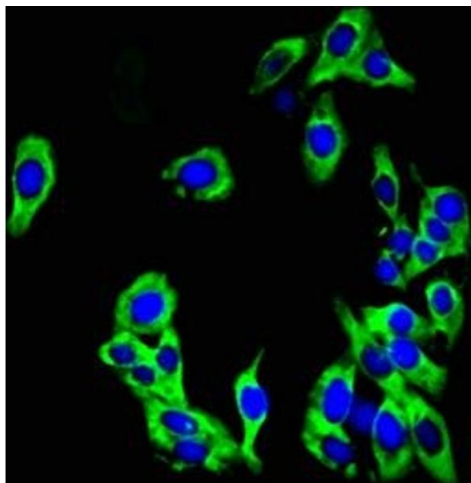
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human kidney tissue using ABIN7163916 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human placenta tissue using ABIN7163916 at dilution of 1:100



Immunofluorescence

Image 3. Immunofluorescent analysis of HepG2 cells using ABIN7163916 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)