Datasheet for ABIN7163918

# anti-KCNK1 antibody (AA 268-336) (FITC)

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## Overview

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| Quantity: | 100 µg |
| Target: | KCNK1 |
| Binding Specificity: | AA 268-336 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This KCNK1 antibody is conjugated to FITC |
| Application: | Please inquire |

## Product Details

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

## Target Details

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| 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

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| | 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).<br>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: | O00180 |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | Preservative: 0.03 % Proclin 300<br>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. |