

KCNJ8 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12302a

Product Information

Application WB, IHC-P, E **Primary Accession** Q15842

Other Accession <u>Q63664</u>, <u>P97794</u>, <u>NP_004973.1</u>

Reactivity Human **Predicted** Mouse, Rat Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB31081 **Calculated MW** 47968 **Antigen Region** 4-33

Additional Information

Gene ID 3764

Other Names ATP-sensitive inward rectifier potassium channel 8, Inward rectifier K(+)

channel Kir61, Potassium channel, inwardly rectifying subfamily J member 8,

uKATP-1, KCNJ8

Target/Specificity This KCNJ8 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 4-33 amino acids from the N-terminal

region of human KCNJ8.

Dilution WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions KCNJ8 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name KCNJ8

Function Inward rectifier potassium channels are characterized by a greater tendency

to allow potassium to flow into the cell rather than out of it (PubMed:20558321, PubMed:21836131, PubMed:24700710, PubMed:28842488). Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages (PubMed:20558321, PubMed:21836131, PubMed:24700710, PubMed:28842488). The inward rectification is mainly due to the blockage of outward current by internal magnesium. This channel is activated by internal ATP and can be blocked by external barium (PubMed:20558321, PubMed:21836131, PubMed:24700710, PubMed:28842488). Can form a sulfonylurea-sensitive but ATP-insensitive potassium channel with ABCC9 (By similarity).

Cellular Location Membrane; Multi-pass membrane protein

Tissue Location Predominantly detected in fetal and adult heart.

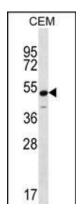
Background

Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. The encoded protein, which has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins. [provided by RefSeq].

References

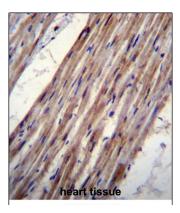
Medeiros-Domingo, A., et al. Heart Rhythm 7(10):1466-1471(2010) Ellis, J.A., et al. Physiol. Genomics 40(3):184-188(2010) Shi, W., et al. J. Biol. Chem. 285(5):3021-3029(2010) Winkler, M., et al. J. Biol. Chem. 284(11):6752-6762(2009) Ploug, K.B., et al. Eur. J. Pharmacol. 601 (1-3), 43-49 (2008) :

Images



KCNJ8 Antibody (N-term) (Cat. #AP12302a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the KCNJ8 antibody detected the KCNJ8 protein (arrow).

KCNJ8 Antibody (N-term) (Cat. #AP12302a)immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of KCNJ8 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



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