10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KCNJ13 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12387a

Product Information

Application	WB, IHC-P, E
Primary Accession	O60928
Other Accession	NP_002233.2, NP_001165887.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31344
Calculated MW	40530
Antigen Region	67-95

Additional Information

Gene ID	3769
Other Names	Inward rectifier potassium channel 13, Inward rectifier K(+) channel Kir71, Potassium channel, inwardly rectifying subfamily J member 13, KCNJ13
Target/Specificity	This KCNJ13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-95 amino acids from the N-terminal region of human KCNJ13.
Dilution	WB~~1:1000 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	KCNJ13 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KCNJ13 (HGNC:6259)
Function	Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. 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. The inward rectification is mainly due to the blockage of outward current by internal magnesium. KCNJ13 has a very low single channel conductance, low sensitivity to block by external barium and cesium, and no dependence of its inward rectification properties on the internal blocking particle magnesium.
Cellular Location	Membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Localized at the retinal pigmented epithelium (RPE) apical microvilli {ECO:0000250|UniProtKB:P86046}
Tissue Location	Predominantly expressed in small intestine. Expression is also detected in stomach, kidney, and all central nervous system regions tested with the exception of spinal cord

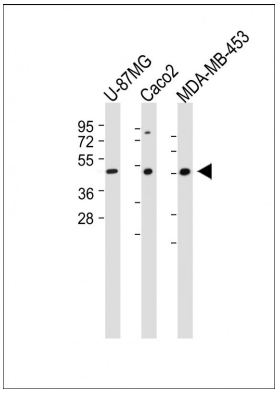
Background

This gene encodes a member of the inwardly rectifying potassium channel family of proteins. Members of this family form ion channel pores that allow potassium ions to pass into a cell. The encoded protein belongs to a subfamily of low signal channel conductance proteins that have a low dependence on potassium concentration. Mutations in this gene are associated with snowflake vitreoretinal degeneration. Alternate splicing results in multiple transcript variants.

References

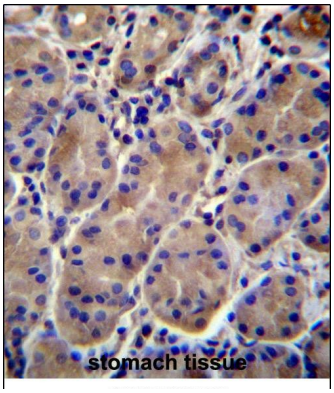
Zhang, W., et al. Biochem. Biophys. Res. Commun. 377(3):981-986(2008)
Ji, W., et al. Nat. Genet. 40(5):592-599(2008)
Hughes, B.A., et al. Am. J. Physiol., Cell Physiol. 294 (2), C423-C431 (2008) :
Hejtmancik, J.F., et al. Am. J. Hum. Genet. 82(1):174-180(2008)
Yang, D., et al. Exp. Eye Res. 86(1):81-91(2008)

Images



All lanes : Anti-KCNJ13 Antibody (N-term) at 1:1000 dilution Lane 1: U-87 MG whole cell lysate Lane 2: Caco2 whole cell lysate Lane 3: MDA-MB-453 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

KCNJ13 Antibody (N-term) (Cat. #AP12387a)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KCNJ13 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.