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Kir4.1 Polyclonal Antibody

Catalog # AP63699

Product Information

Application	IHC-P
Primary Accession	P78508
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42508

Additional Information

Gene ID	3766
Other Names	ATP-sensitive inward rectifier potassium channel 10 (ATP-dependent inwardly rectifying potassium channel Kir4.1) (Inward rectifier K(+) channel Kir1.2) (Potassium channel, inwardly rectifying subfamily J member 10)
Dilution	IHC-P~~IHC 1:100-200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

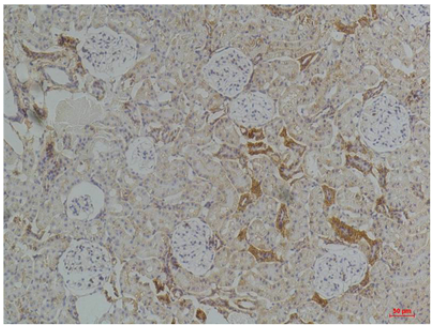
Name	KCNJ10 (HGNC:6256)
Function	May be responsible for potassium buffering action of glial cells in the brain (By similarity). Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it (PubMed:8995301). Their voltage dependence 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:8995301). The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by extracellular barium and cesium (PubMed:8995301). In the kidney, together with KCNJ16, mediates basolateral K(+) recycling in distal tubules; this process is critical for Na(+) reabsorption at the tubules (PubMed:24561201).
Cellular Location	Membrane; Multi- pass membrane protein. Basolateral cell membrane. Note=In kidney distal convoluted tubules, located in the basolateral membrane where it colocalizes with KCNJ16.
Tissue Location	Expressed in kidney (at protein level) (PubMed:24561201). In the nephron,

expressed in the distal convoluted tubule, the connecting tubule, the collecting duct and cortical thick ascending limbs (PubMed:20651251).

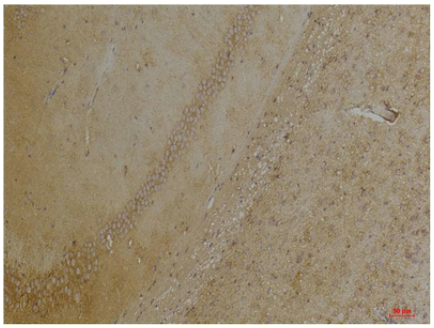
Background

May be responsible for potassium buffering action of glial cells in the brain. 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. Can be blocked by extracellular barium and cesium (By similarity). In the kidney, together with KCNJ16, mediates basolateral K(+) recycling in distal tubules; this process is critical for Na(+) reabsorption at the tubules.

Images



Immunohistochemical analysis of paraffin-embedded Rat KidneyTissue using Kir4.1 Rabbit pAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse BrainTissue using Kir4.1 Rabbit pAb diluted at 1:200.

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