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Anti-Kir3.3 Antibody

Catalog # AP51300

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q92806
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44020

Additional Information

Gene ID	3765
Other Names	GIRK3; G protein-activated inward rectifier potassium channel 3; GIRK-3; Inward rectifier K(+) channel Kir3.3; Potassium channel, inwardly rectifying subfamily J member 9
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Kir3.3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

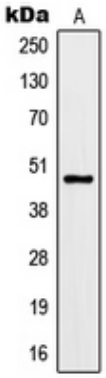
Protein Information

Name	KCNJ9
Synonyms	GIRK3
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, This receptor is controlled by G proteins. Unable to produce channel activity when expressed alone (PubMed:10659995). Forms a functional channel in association with KCNJ3/GIRK1 (By similarity).
Cellular Location	Membrane; Multi-pass membrane protein

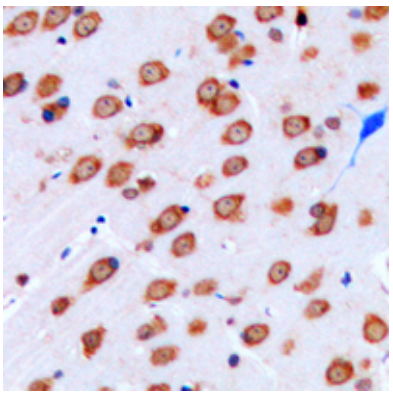
References

Schoots O.,et al.Cell. Signal. 11:871-883(1999).
Vaughn J.,et al.Biochem. Biophys. Res. Commun. 274:302-309(2000).
Gregory S.G.,et al.Nature 441:315-321(2006).

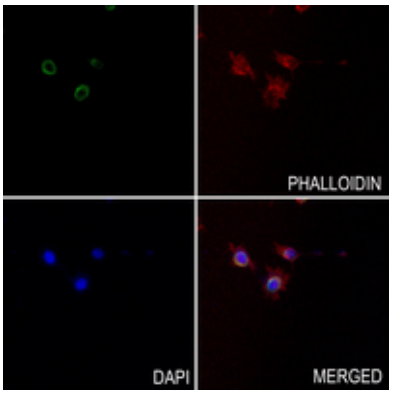
Images



Western blot analysis of Kir3.3 expression in rat brain (A) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 48 kD)



Immunohistochemical analysis of Kir3.3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Kir3.3 staining in RAW264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).