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

Anti-Kir6.2 (Phospho-T224) Antibody

Catalog # AP61079

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q14654
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43526

Additional Information

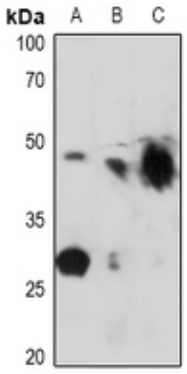
Gene ID	3767
Other Names	ATP-sensitive inward rectifier potassium channel 11; IKATP; Inward rectifier K(+) channel Kir6.2; Potassium channel inwardly rectifying subfamily J member 11
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding T224 of human Kir6.2 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/100), IF/IC (1/100 - 1/500) 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

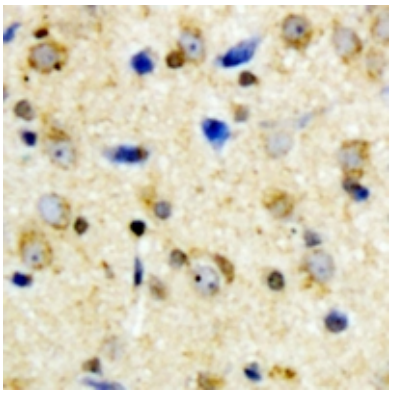
Name	KCNJ11
Function	Inward rectifier potassium channel that forms the pore of ATP-sensitive potassium channels (KATP), regulating potassium permeability as a function of cytoplasmic ATP and ADP concentrations in many different cells (PubMed:29286281, PubMed:34815345). Inward rectifier potassium channels 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 (By similarity). In pancreatic cells, it forms KATP channels with ABCC8/SUR1 (PubMed:29286281, PubMed:34815345). Can form cardiac and smooth muscle-type KATP channels with ABCC9.

Cellular Location Membrane; Multi-pass membrane protein.

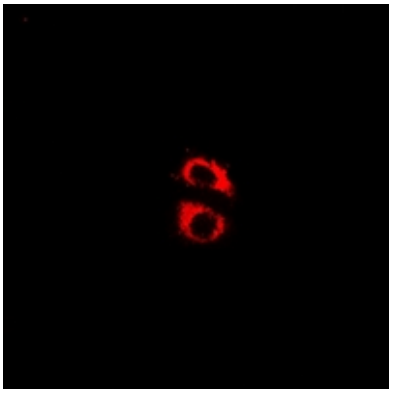
Images



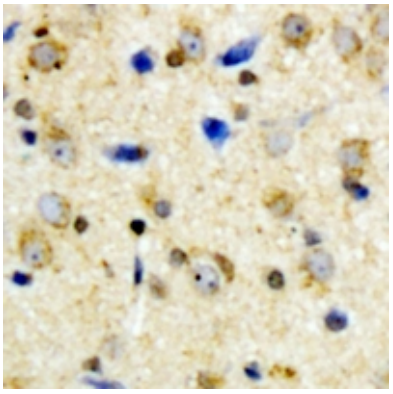
Western blot analysis of Kir6.2 (Phospho-T224) expression in MCF7 (A), mouse liver (B), rat liver (C) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 44 kD)



Immunohistochemical analysis of Kir6.2 (Phospho-T224) 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 Kir6.2 (Phospho-T224) staining in HuvEc 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 Alexa Fluor 647-conjugated secondary antibody (red) in PBS at room temperature in the dark.



Immunohistochemical analysis of Kir6.2 (pT224) 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.