

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) Mouse Monoclonal Antibody Catalog # ALS14985

Specification

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IF, WB, IHC <u>014500</u> Human, Mouse, Rat Mouse Monoclonal 49kDa KDa

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Additional Information

Gene ID 3768

Other Names ATP-sensitive inward rectifier potassium channel 12, Inward rectifier K(+) channel Kir2.2, IRK-2, Inward rectifier K(+) channel Kir2.2v, Potassium channel, inwardly rectifying subfamily J member 12, KCNJ12, IRK2, KCNJN1

Target/Specificity Detects ~45 kD protein. No cross reactivity against Kir2.1, or Kir2.3.

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Protein Information

Name KCNJ12

Synonyms IRK2, KCNJN1

Function

Inward rectifying potassium channel that is activated by phosphatidylinositol 4,5-bisphosphate and that probably participates in controlling the resting membrane potential in electrically excitable cells. Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. 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.



Cellular Location

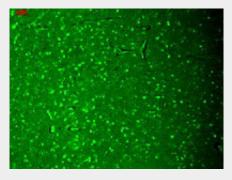
Membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Protocols

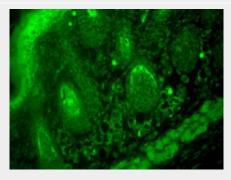
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Images



Kir2.2 (S24-1), Human hippocampus.

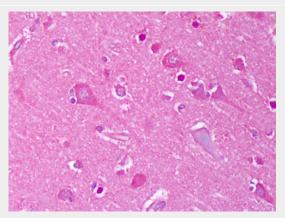


Kir2.2 (S24-1), Mouse back skin.

201.5→ 156.75→	
106→	
79.68→	5
48.33→	-
37.81→	
23.27→	
18.19→	
. 14.7→*	1
9.50→	



Kir2 2 (S24-1), Human cell line mix.



Anti-KCNJ12 / Kir2.2 antibody IHC of human brain, cortex neurons. KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Background

Inward rectifying potassium channel that is activated by phosphatidylinositol 4,5-bisphosphate and that probably participates in controlling the resting membrane potential in electrically excitable cells. Probably participates in establishing action potential waveform and excitability of neuronal and muscle tissues. 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.

KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - References

Wible B.A., et al.Circ. Res. 76:343-350(1995). Namba N., et al.FEBS Lett. 386:211-214(1996). Kaibara M., et al.FEBS Lett. 531:250-254(2002). Gallagher P.G., et al.J. Biol. Chem. 273:1339-1348(1998). Preisig-Muller R., et al.Proc. Natl. Acad. Sci. U.S.A. 99:7774-7779(2002).