

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

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

Application	IF, WB, IHC
Primary Accession	<a href="#">Q14500</a>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	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.

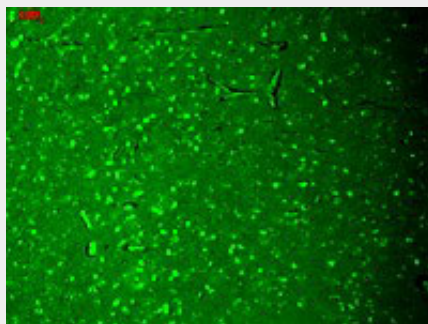
**Cellular Location**

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

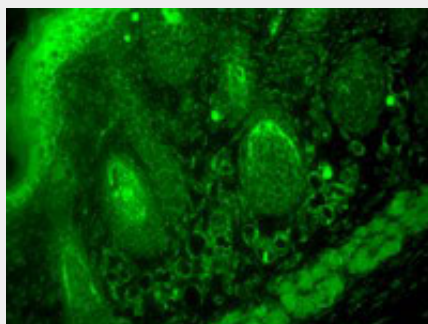
**KCNJ12 / Kir2.2 Antibody (aa362-427, clone S124B-38) - Protocols**

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

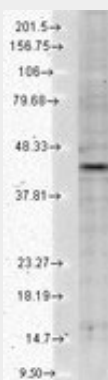
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

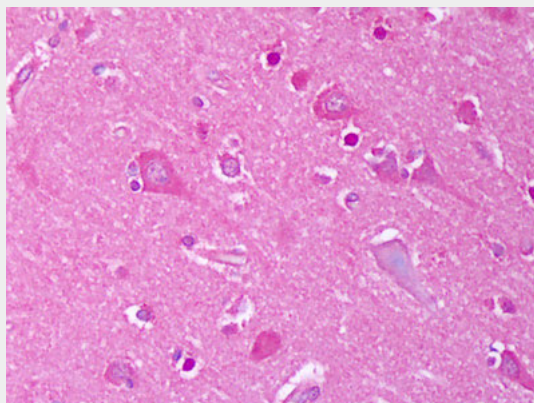
Kir2.2 (S24-1), Human hippocampus.



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



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).