10320 Camino Santa Fe, Suite G
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Kir6.1 Antibody
Kir6.1 Antibody, Clone S366-60
Catalog # ASM10323

Specification

Kir6.1 Antibody - Product Information

Application	**WB**
Primary Accession	Q63664
Other Accession	NP_058795.3
Host	**Mouse**
Isotype	**IgG2A**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Rat Kir6.1 Monoclonal IgG2A

Target/Specificity
Detects ~45kDa.

Other Names
ATP-sensitive inward rectifier potassium channel 8 Antibody, Potassium channel inwardly rectifying subfamily J member 8 Antibody, uKATP-1 Antibody, Kcnj8 Antibody

Immunogen
Fusion protein amino acids 306-424 (Cytoplasmic C-terminus) of rat Kir6.1

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:100 dilution of SMC-491 was sufficient for detection of Kir6.1 in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Membrane

Kir6.1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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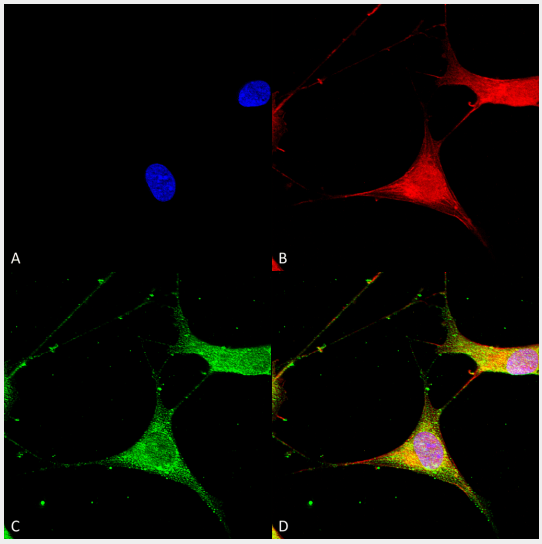
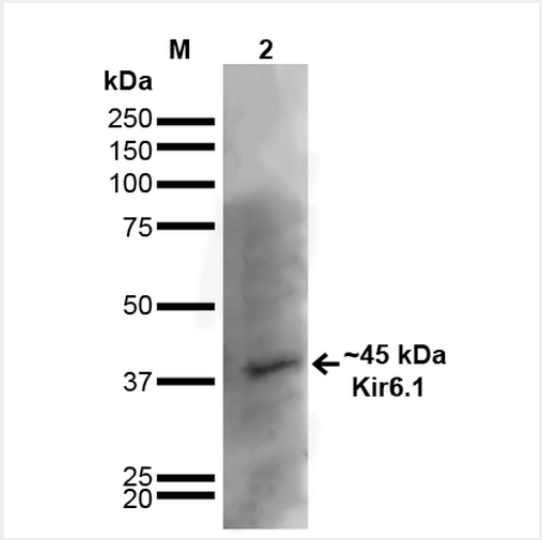
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kir6.1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone N366/60 (ASM10323). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-Kir6.1 Monoclonal Antibody (ASM10323) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Kir6.1 Antibody (D) Composite.



Western Blot analysis of Rat Brain showing detection of ~45 kDa Kir6.1 protein using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone N366/60 (ASM10323). Lane 1: MW Ladder. Lane 2: Rat Brain. Load: 20 µg. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Kir6.1 Monoclonal Antibody (ASM10323) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~45 kDa. Other Band(s): ~100 kDa.

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Kir6.1 Antibody - Background

Several different potassium channels are known to be involved with electrical signaling in the nervous system. One class is activated by depolarization whereas a second class is not. The latter are referred to as inwardly rectifying K+ channels, and they have a greater tendency to allow potassium to flow into the cell rather than out of it. This asymmetry in potassium ion conductance plays a key role in the excitability of muscle cells and neurons. The protein encoded by this gene is an integral membrane protein and member of the inward rectifier potassium channel family (1-3). This is predominantly detected in fetal and adult hearts, and defects can be associated with J-wave syndromes, a group of heart disorders characterized by early repolarization events (4).

Kir6.1 Antibody - References

1. Zobel C., et al. (2003) J Physiol. 550: 365-372.
2. Panama B.K., McLerie M., and Lopatin A.N. (2007) Am J Physiol Heart Circ Physiol. 293: H3558-H3567.
3. Munoz V., et al. (2007) Heart Rhythm. 4(4): 487-496.
4. Aguilar-Bryan L., et al. (1998) Physiol Rev. 78(1): 227-245.