

Kir6.1 Antibody

Kir6.1 Antibody, Clone S366-60

Catalog # ASM10323

Specification

Kir6.1 Antibody - Product Information

Application **ICC/IF, WB**
Primary Accession [O63664](#)
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 **-20°C**

Storage Buffer

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

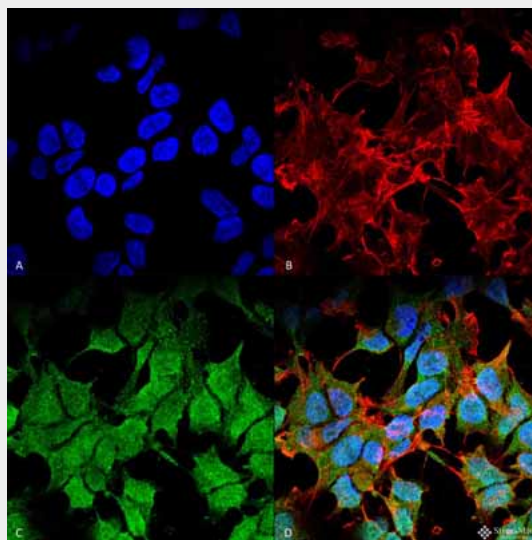
Shipping **Blue Ice or 4°C**
Temperature

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

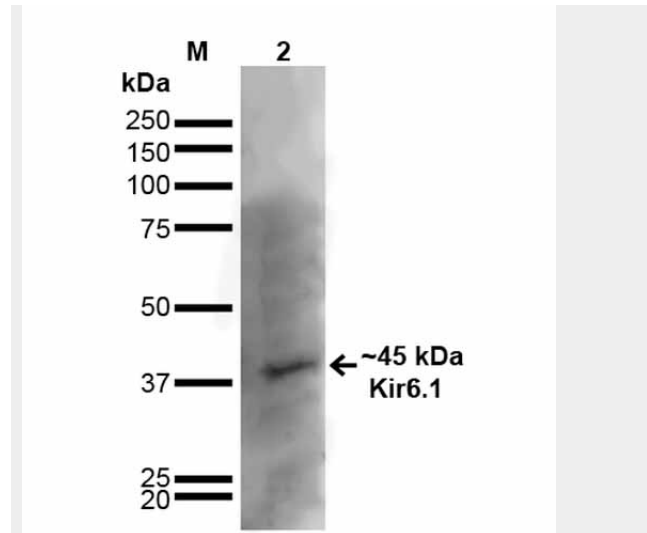


Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone S366-60 (ASM10323). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Kir6.1 Monoclonal Antibody (ASM10323) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Kir6.1 Antibody (D) Composite.

Kir6.1 Antibody - 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](#)



Western Blot analysis of Rat Brain showing detection of ~45 kDa Kir6.1 protein using Mouse Anti-Kir6.1 Monoclonal Antibody, Clone S366-60 (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.

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.