

SUR2A Antibody
SUR2A Antibody, Clone S319A-14
Catalog # ASM10265

Specification

SUR2A Antibody - Product Information

Application **ICC/IF, WB**
Primary Accession [P70170](#)
Other Accession [NP_001038185.1](#)
Host **Mouse**
Isotype **IgG2A**
Reactivity **Mouse, Rat**
Clonality **Monoclonal**

Description

Mouse Anti-Mouse SUR2A Monoclonal IgG2A

Target/Specificity

Detects ~120kDa. Does not cross-react with SUR2B.

Other Names

ABCC9 Antibody, Sulfonylurea receptor 2 Antibody, CMD10 Antibody, ABC37 Antibody, ATP-binding cassette transporter sub-family C member 9 Antibody, Sulfonylurea receptor 2A Antibody, isoform SUR2A Antibody

Immunogen

Fusion protein amino acids 1505-1546 (SSIV DAGLVLVFSEGILVECDTGPNLLQHKNGLFSTLV MTNK, cytoplasmic C-terminus) of mouse SUR2A

Purification

Protein G Purified

Storage **-20°C**

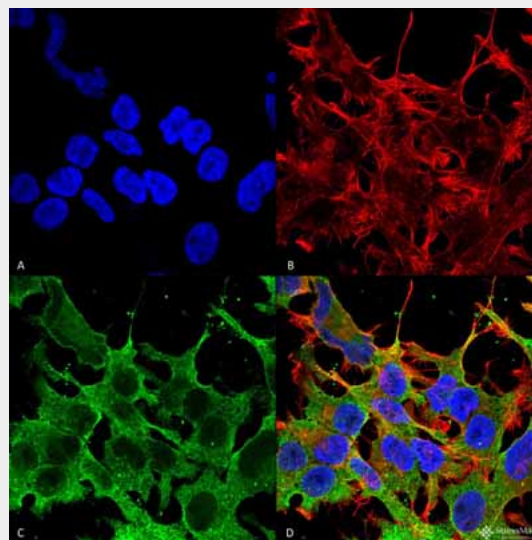
Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

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

Certificate of Analysis

1 µg/ml of SMC-431 was sufficient for detection of SUR2A in 20 µg of mouse brain membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.



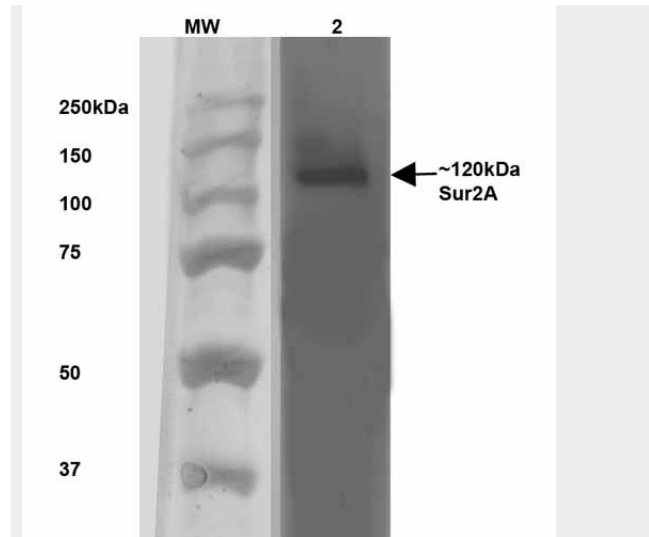
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR2A Monoclonal Antibody, Clone S319A-14 (ASM10265). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SUR2A Monoclonal Antibody (ASM10265) at 1:100 for 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) SUR2A Antibody (D) Composite.

Cellular Localization Membrane

SUR2A 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 Membrane showing detection of ~120 kDa SUR2A protein using Mouse Anti-SUR2A Monoclonal Antibody, Clone S319A-14 (ASM10265). Lane 1: MW Ladder. Lane 2: Rat Brain Membrane (10 µg). . Load: 10 µg. Block: 5% milk. Primary Antibody: Mouse Anti-SUR2A Monoclonal Antibody (ASM10265) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: TMB solution for 10 min at RT. Predicted/Observed Size: ~120 kDa.

SUR2A Antibody - Background

Sulfonylurea receptors (SUR) are membrane proteins which are the molecular targets of the sulfonylurea class of anti-diabetic drugs whose mechanism of action is to promote insulin release from pancreatic beta cells. More specifically, SUR proteins are subunits of the inward-rectifier potassium ion channels Kir6.x (6.1 and 6.2) (1). The association of four Kir6.x and four SUR subunits form an ion conducting channel commonly referred to as the KATP channel. The primary function of the sulfonylurea receptor is to sense intracellular levels of the nucleotides ATP and ADP and in response facilitate the open or closing its associated Kir6.x potassium channel. Hence the KATP channel monitors the energy balance within the cell (2).

SUR2A Antibody - References

1. Campbell J.D., Sansom M.S., Ashcroft F.M.

(2003) EMBO Resp. 4(11): 1038-1042.
2. Nichols C.G. (2006) Nature. 440 (7083):
470-476.