

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

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**SUR2A Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P70170</a>
Other Accession	<a href="#">NP_001038185.1</a>
Host	<b>Mouse</b>
Isotype	<b>IgG2A</b>
Reactivity	<b>Mouse, Rat</b>
Clonality	<b>Monoclonal</b>

**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 (SSIVDAGLVLVFSEGLVECDTGPNLLQHKNGLFSTLVMTNK, 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 Temperature

**Blue Ice or 4°C**

**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.

**Cellular Localization**

Membrane

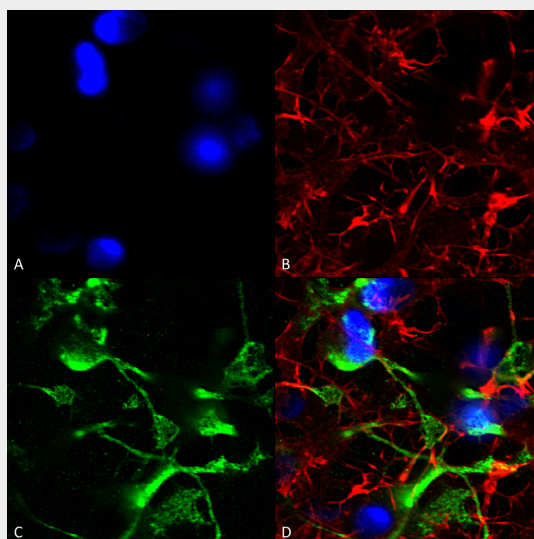
**SUR2A Antibody - Protocols**

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

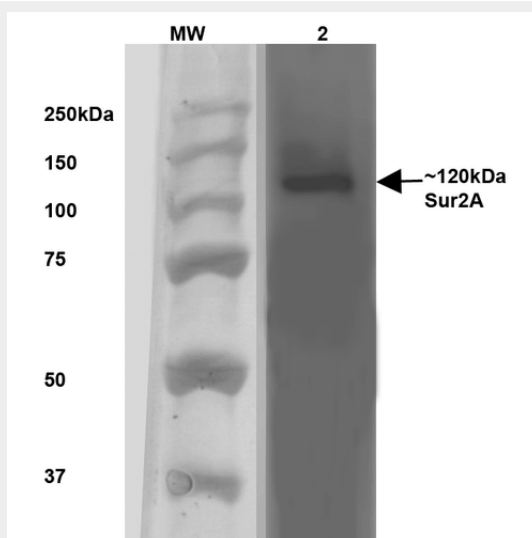
- [Western Blot](#)

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

## SUR2A Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR2A Monoclonal Antibody, Clone N319A/14 (ASM10265). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-SUR2A Monoclonal Antibody (ASM10265) at 1:200 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) SUR2A Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~120 kDa SUR2A protein using Mouse Anti-SUR2A Monoclonal Antibody, Clone N319A/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.