

**SUR1 and SUR2B Antibody**  
**SUR1/SUR2B Antibody, Clone S323A-31**  
**Catalog # ASM10266****Specification****SUR1 and SUR2B Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O63563</a>
Other Accession	<a href="#">NP_037172.2</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Mouse, Rat</b>
Clonality	<b>Monoclonal</b>
Format	<b>HRP</b>

**Description**

Mouse Anti-Rat SUR1 and SUR2B Monoclonal IgG1

**Target/Specificity**

Detects ~175kDa and smaller fragments likely due to proteolytic cleavage.

**Other Names**

ABC36 Antibody, Abcc8 Antibody, ABCC8\_HUMAN Antibody, ATP binding cassette sub family C (CFTR/MRP) member 8 Antibody, ATP binding cassette transporter sub family C member 8 (1) Antibody, ATP-binding cassette sub-family C member 8 Antibody, HHF1 Antibody, HI Antibody, HRINS Antibody, MRP8 Antibody, PHHI Antibody, Sulfonylurea receptor (hyperinsulinemia) Antibody, Sulfonylurea receptor 1 Antibody, SUR Antibody, SUR1 Antibody, SUR1delta2 Antibody, TNDM2 Antibody, ABC37 Antibody, abcc9 Antibody, ABCC9\_HUMAN Antibody, AI414027 Antibody, AI449286 Antibody, ATFB12 Antibody, ATP-binding cassette sub-family C member 9 Antibody, ATP-binding cassette transporter sub-family C member 9 Antibody, ATP-binding cassette Antibody, sub-family C (CFTR/MRP) Antibody, member 9 Antibody, CANTU Antibody, CMD10 Antibody, FLJ36852 Antibody, Sulfonylurea receptor 2 Antibody, Sulfonylurea-binding protein 2 Antibody, SUR2 Antibody, SUR2A Antibody, SUR2B Antibody

**Immunogen**

Fusion protein amino acids 1503-1545 (VHTILTADLVIVMKRGNILEYDTPESLLAQEDGVFASFVRADM, cytoplasmic C-terminus) of rat SUR2B

**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-432 was sufficient for detection of SUR1 and SUR2B 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**

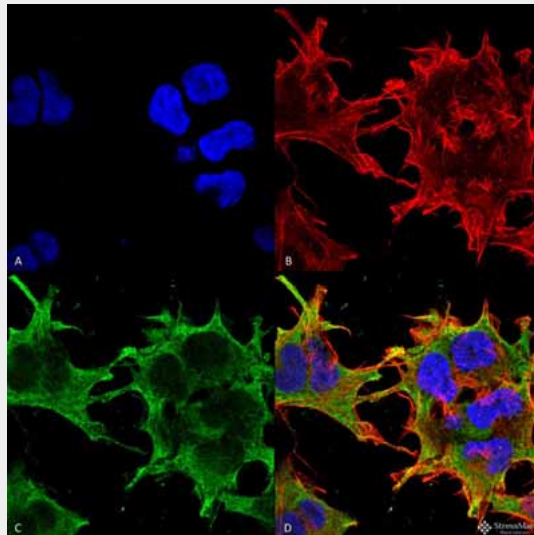
Membrane

### **SUR1 and SUR2B Antibody - Protocols**

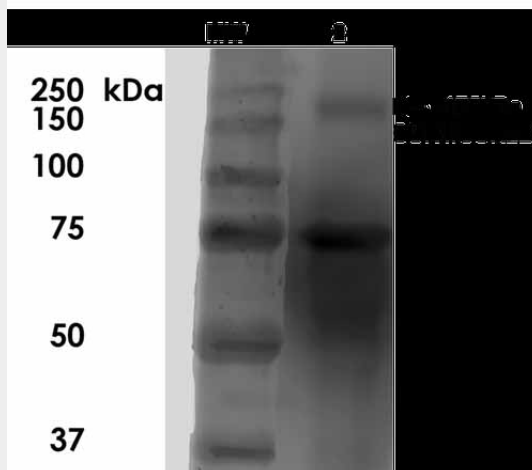
Provided below are standard protocols that you may find useful for product applications.

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

### **SUR1 and SUR2B Antibody - Images**



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR1 and SUR2B Monoclonal Antibody, Clone S323A-31 (ASM10266). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SUR1 and SUR2B Monoclonal Antibody (ASM10266) 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) SUR1 and SUR2B Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~174 kDa SUR1/SUR2B protein using Mouse Anti-SUR1/SUR2B Monoclonal Antibody, Clone S323A-31 (ASM10266). Lane 1: MW Ladder. Lane 2: Rat Brain Membrane (10 µg). . Load: 10 µg. Block: 5% milk. Primary Antibody: Mouse Anti-SUR1/SUR2B Monoclonal Antibody (ASM10266) 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: ~174 kDa. Other Band(s): ~75 kDa.

#### **SUR1 and SUR2B 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).

#### **SUR1 and SUR2B 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.