

**SUR1 Antibody**  
**SUR1 Antibody, Clone S289-16**  
**Catalog # ASM10243**

**Specification**

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**SUR1 Antibody - Product Information**

Application	<b>WB, IHC, ICC</b>
Primary Accession	<a href="#">Q09429</a>
Other Accession	<a href="#">NP_037171.2</a>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Reactivity	<b>Human, Mouse, Rat, Hamster</b>
Clonality	<b>Monoclonal</b>
Format	<b>ATTO 488</b>

**Description**

Mouse Anti-Rat SUR1 Monoclonal IgG1

**Target/Specificity**

Detects ~160kDa. Does not cross-react with SUR2B.

**Other Names**

AM60008PU-N Antibody, ABC36 Antibody, Abcc8 Antibody, ATP binding cassette sub family C member 8 Antibody, HHF1 Antibody, HRINS Antibody, MRP8 Antibody, PHHI Antibody, SUR Antibody, SUR1 Antibody, Sulfonylurea receptor (hyperinsulinemia) 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, HI Antibody, PHHI Antibody, Sulfonylurea receptor 1 Antibody, SUR1delta2 Antibody, TNDM2 Antibody

**Immunogen**

Fusion protein amino acids 1548-1582 (cytoplasmic C-terminus) of rat SUR1

**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-409 was sufficient for detection of SUR1 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**

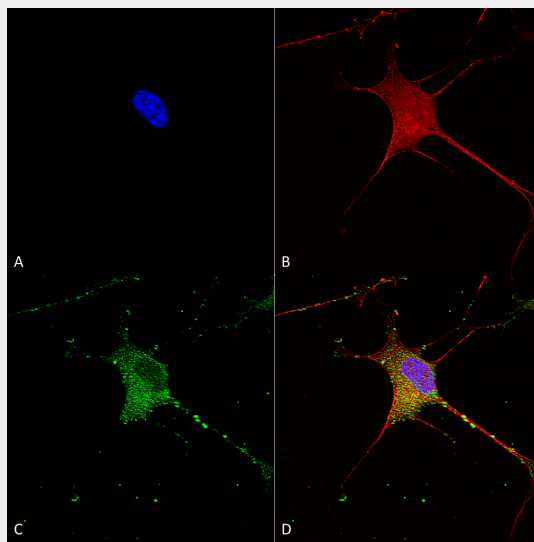
Membrane

**SUR1 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 Antibody - Images**



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR1 Monoclonal Antibody, Clone N289/16 (ASM10243). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-SUR1 Monoclonal Antibody (ASM10243) at 1:50 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) SUR1 Antibody (D) Composite.

### **SUR1 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 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.