Datasheet for ABIN2482993

anti-ABCC8 antibody (AA 1548-1582) (Alkaline Phosphatase (AP))

3 Images

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Overview

Quantity:	100 µg
Target:	ABCC8
Binding Specificity:	AA 1548-1582
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ABCC8 antibody is conjugated to Alkaline Phosphatase (AP)
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	Fusion protein amino acids 1548-1582 (cytoplasmic C-terminus) of rat SUR1
Clone:	S289-16
Isotype:	IgG1
Specificity:	Detects ~160 kDa. Does not cross-react with SUR2B.
Cross-Reactivity:	Hamster, Human, Mouse, Rat
Purification:	Protein G Purified

Target Details

Target:	ABCC8

Target Details

Alternative Name:	SUR1 (ABCC8 Products)
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).
Gene ID:	25559
NCBI Accession:	NP_037171
UniProt:	Q09429
Pathways:	Negative Regulation of Hormone Secretion

Application Details

Application Notes:	• WB (1:1000) • IHC (1:1000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN2482993 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.
Restrictions:	For Research Use only

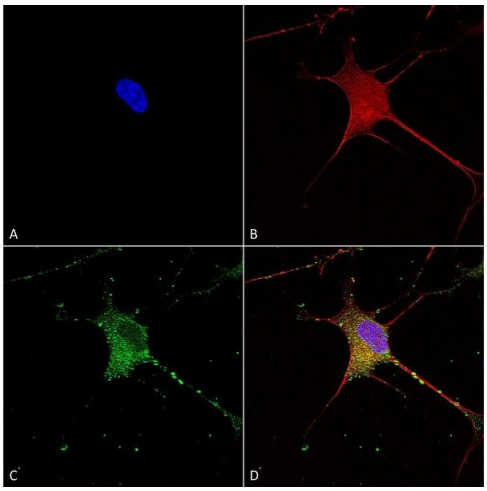
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

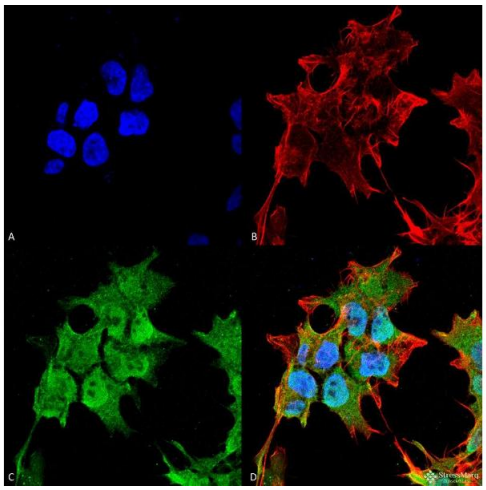
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



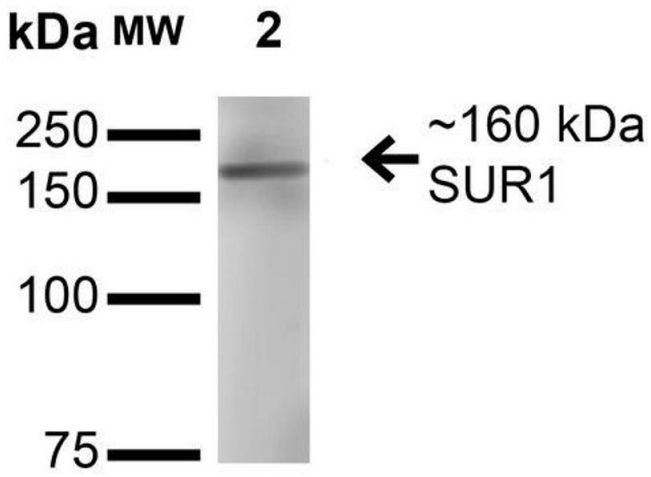
Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR1 Monoclonal Antibody, Clone S289-16 (ABIN2482993). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-SUR1 Monoclonal Antibody (ABIN2482993) 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, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) SUR1 Antibody (D) Composite.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-SUR1 Monoclonal Antibody, Clone S289-16 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-SUR1 Monoclonal Antibody 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: Cytoplasm, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) SUR1 Antibody (D) Composite.



Western Blotting

Image 3. Western Blot analysis of Rat Brain Membrane showing detection of ~160 kDa SUR1 protein using Mouse Anti-SUR1 Monoclonal Antibody, Clone S289-16 . Lane 1: Molecular Weight Ladder. Lane 2: Rat Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-SUR1 Monoclonal Antibody at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~160 kDa.