

Basic Information

Product Name	Anti-ABCC8 Antibody
Gene Name	ABCC8
Source	Rabbit
Isotype	IgG
Species Reactivity	human,mouse,rat
Tested Application	WB,FCM,ICC,IHC-F
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence of human SUR1 (TIQREGTLKDFQRSEQLFEHWKTLMNRQDQELEKETVTERKA).
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	177KD
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in frozen section (IHC-F):1:50-400 Immunocytochemistry in fixed cells(ICC): 1:50-400 Flow cytometry (FCM): 1-3 $\mu\text{g}/1 \times 10^6$ cells

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

ATP-binding cassette transporter sub-family C member 8 is a protein that in humans is encoded by the ABCC8 gene. The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily which is involved in multi-drug resistance. This protein functions as a modulator of ATP-sensitive potassium channels and insulin release. Mutations and deficiencies in this protein have been observed in patients with hyperinsulinemic hypoglycemia of infancy, an autosomal recessive disorder of unregulated and high insulin secretion. Mutations have also been associated with non-insulin-dependent diabetes mellitus type II, an autosomal dominant disease of defective insulin secretion. Alternatively spliced transcript variants have been found for this gene.

Selected Validation Data

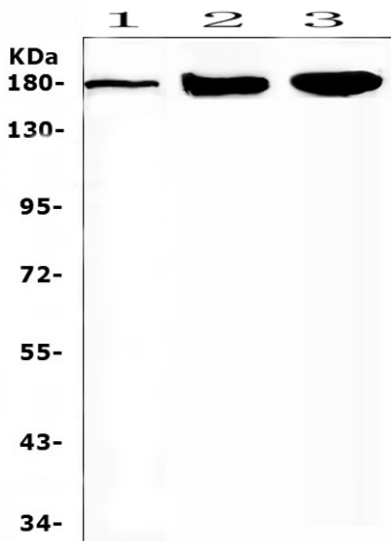


Figure 1. Western blot analysis of SUR1 using anti-SUR1 antibody (A00895-1). Lane 1: human placenta tissue lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse brain tissue lysates. anti-SUR1 antigen affinity purified polyclonal antibody (Catalog # A00895-1) probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for SUR1 at approximately 177KDa. The expected band size for SUR1 is at 177KDa.

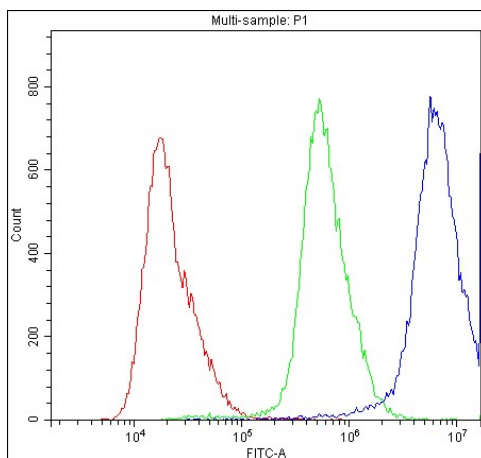


Figure 2. Flow Cytometry analysis of A431 cells using anti-ABCC8 antibody (A00895-1). Overlay histogram showing A431 cells stained with A00895-1 (Blue line). anti-ABCC8 Antibody (A00895-1, 1 μ g/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.