PMR1 (G-9): sc-365375

**BACKGROUND**

The *Saccharomyces cerevisiae* protein, PMR1, encodes P-type calcium trans¬
port ATPase, which localizes to the Golgi and regulates the intracellular trans¬
nport of calcium and manganese. The human homologue, ATP2C1 (also designated SPLA in rat), also regulates the transport of calcium in the Golgi com¬
plex and is related to other P-type ATPases family members, such as the sarco¬
(endo)plasmic calcium ATPase (SERCA) and the plasma membrane calcium ATPase (PCMA). PMR1 is a transmembrane protein that exists as two splice vari¬
ants, which vary by 20 amino acids. PMR1 is mutated in Hailey-Hailey disease (HHD), which is an autosomal dominant disorder that is character¬
ized by blisters and erosions of the skin. These finding provide further evi¬
dence that PMR1 plays a key role in maintaining the integrity of the epider¬
mis by controlling intracellular calcium signaling.

**REFERENCES**

bution of alternatively spliced mRNAs encoding possible mammalian homologues of the yeast secretory pathway calcium pump. Biochemistry 31: 7600-7608.

**CHROMOSOMAL LOCATION**

Genetic locus: ATP2C1 (human) mapping to 3q22.1; Atp2c1 (mouse) mapping to 9 F1.

**SOURCE**

PMR1 (G-9) is a mouse monoclonal antibody raised against amino acids 720-919 of PMR1 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PMR1 (G-9) is available conjugated to agarose (sc-365375 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365375 HRP), 200 μg/ml, for WB, HIC(P) and ELISA; to either phycoerythrin (sc-365375 PE), fluorescein (sc-365375 FITC), Alexa Fluor® 488 (sc-365375 AF488), Alexa Fluor® 546 (sc-365375 AF546), Alexa Fluor® 594 (sc-365375 AF594) or Alexa Fluor® 647 (sc-365375 AF647), 200 μg/ml, for WB (RGB), IF, HIC(P) and FCM; and to either Alexa Fluor® 680 (sc-365375 AF680) or Alexa Fluor® 790 (sc-365375 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

PMR1 (G-9) is recommended for detection of PMR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PMR1 siRNA (h): sc-36285, PMR1 siRNA (m): sc-36286, PMR1 shRNA Plasmid (h): sc-36286-SH, PMR1 shRNA Plasmid (m): sc-36286-SH, PMR1 shRNA (h) Lentiviral Particles: sc-36285-V and PMR1 shRNA (m) Lentiviral Particles: sc-36286-V.

Molecular Weight of PMR1: 104 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunopre¬

**DATA**

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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