

Product Specification Sheet

Cat. #MA-30001 Mouse Monoclonal Anti-Human ATPase, Ca⁺⁺ transporting, type 2C, member 1 (ATP2C1); Ascites

SIZE : 100 ul

ATP2C1, also known as PMR1, it belongs to the family of P-type cation transport ATPases. This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of the calcium. The human homologue, ATP2C1 (also designated SPLA in rat), also regulates the transport of calcium in the Golgi complex 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). ATP2C1 is a transmembrane protein that exists as two splice variants, which vary by 20 amino acids. Defects in ATP2C1 cause Hailey-Hailey disease, which is an autosomal dominant disorder that is characterized by blisters and erosions of the skin. These findings provide further evidence that PMR1 plays a key role in maintaining the integrity of the epidermis by controlling intracellular calcium signaling.

Source of Antigen and Antibodies

Antigen	Purified recombinant fragment of ATP2C1 expressed in <i>E. Coli</i> .
Ab Host/type	Balb/c mouse. IgG1 Ascetic fluid containing 0.05% sodium azide.
2-Ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Isotype controls:

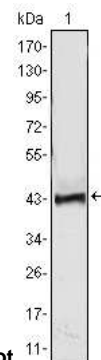
Catalog#	Product Description
20102-101	Mouse IgG1 isotype control, purified
20102-101-APC	Mouse IgG1-APC conjugate (isotype)
20102-101-B	Mouse IgG1-Biotin conjugate (isotype)
20102-101-F	Mouse IgG1-FITC conjugate (isotype)
20102-101-FP	Mouse IgG1-FITC-PE conjugate (isotype)
20102-101-HP	Mouse IgG1-HRP conjugate (isotype)
20102-101-PC5	Mouse IgG1-PE-Cy5 conjugate (isotype)
20102-101-PE	Mouse IgG1-PE conjugate (isotype control)

Suggested Dilutions:

Western blot	1:500 – 1:2000
Immunohistochemistry (IHC):	1:200 – 1:1000
Immunocytochemistry (ICC):	N/A
Flow cytometry (FCM):	N/A
ELISA	1:5000 – 1:100000

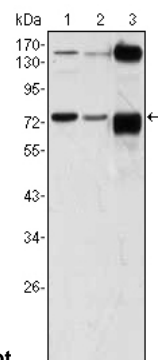
Form: Antibodies are supplied in PBS, pH 7.5, 0.05% azide and 0.1% BSA in liquid (0.5-1 mg/ml) or lyophilized in the same buffer. Reconstitute powder in 100 ul water or PBS. Store at -20°C or below is suitable size Aliquots.

Shipping: 4°C for solutions and room temp for powder.



Western Blot

Figure 1: Western blot analysis using ATP2C1 mAb against human ATP2C1 (AA: 119-269) recombinant protein. (Expected MW is 41.7 kDa)



Western Blot

Figure 2: Western blot analysis using ATP2C1 mouse mAb against A431 (1), Hela (2) and HEK293 (3) cell lysate.

Immunohistochemical analysis

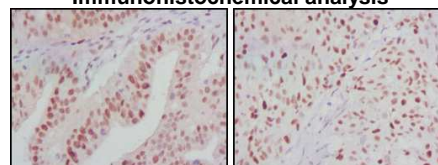


Figure 3: Immunohistochemical analysis of paraffin-embedded human ovarian cancer (left) and breast cancer (right) tissues using ATP2C1 mouse mAb with DAB staining.

References:

J Invest Dermatol. 2005; 125(5):933-5. J Dermatol Sci. 2006; 43(2):150-1. Dermatology. 2007;215(4):277-83.

*All products are for *In vitro* research use only.

Related material available from ADI

MA-30001

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