

**Product Information Sheet** 

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## Monoclonal Anti-Ca<sup>2+</sup> ATPase

Catalogue No. MA1006	<b>Immunogen</b> Human ervthrocvte Ca <sup>2+</sup> -ATPase.
Lot No. 09B13	
	Purification
Clone: CAP-6	Purified by the goat anti-mouse IgG affinity chromatography.
<b>lg type:</b> mouse lgG2a	Application
	Western blot
Size: 100µg/vial	At 4µg/ml with the appropriate system to detect Ca2+ ATPase in
	cells and tissues.
Specificity	Immunohistochemistry(P)
Human, rat, rabbit. chicken.	At 8µg/ml to detect ATPase in formalin fixed and paraffin
No cross reactivity with other	embedded tissues.
proteins.	Other applications have not been tested.
	Optimal dilutions should be determined by end user.
Recommended application	
Western blot	Formulation
Immunohistochemistry(P)	Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg
	NaN <sub>3</sub> as preservative.
	Reconstitution
	1.2% sodium acotate or poutral PRS. If 1ml of PRS is used the

1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be  $100\mu$ g/ml.

### Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at: Antagene, Inc. Toll Free: 1(866)964-2589 email: Info@antageneinc.com

#### BACKGROUND

The Ca(2+)-ATPases are a family of plasma membrane pumps encoded by at least 4 genes: ATP2B1 on chromosome 12q21; ATP2B2; ATP2B3 on Xq28; and ATP2B4 on 1q25. The proteins share 84% amino acid sequence identity and 76% nucleic acid sequence homology. The function of calcium-transporting ATPase found in different membranes is to lower cytoplasmic Ca(2+) concentration by pumping Ca(2+) to luminal or extracellular spaces. Mutations in a plasma membrane Ca(2+)-ATPase gene cause deafness in deafwaddler mice.

#### REFERENCE

Street, V. A.; McKee-Johnson, J. W.; Fonseca, R. C.; Tempel, B. L.; Noben-Trauth, K. : Mutations in a plasma membrane Ca(2+)-ATPase gene cause deafness in deafwaddler mice. *Nature Genet.* 19: 390-394, 1998.