

**ATP2B1 Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a partial recombinant ATP2B1.****Catalog # AT1235a****Specification**

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**ATP2B1 Antibody (monoclonal) (M01) - Product Information**

Application	WB, E
Primary Accession	<a href="#">P20020</a>
Other Accession	<a href="#">NM_001682</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	134685

**ATP2B1 Antibody (monoclonal) (M01) - Additional Information****Gene ID** 490**Other Names**

Plasma membrane calcium-transporting ATPase 1, PMCA1, Plasma membrane calcium ATPase isoform 1, Plasma membrane calcium pump isoform 1, ATP2B1, PMCA1

**Target/Specificity**

ATP2B1 (NP\_001673, 1 a.a. ~ 97 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 kDa.

**Dilution**

WB~~1:500~1000

E~~N/A

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

ATP2B1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

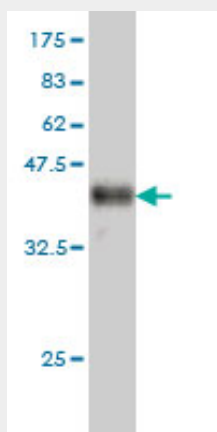
**ATP2B1 Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

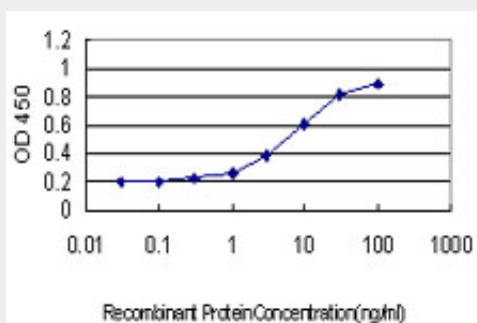
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ATP2B1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.41 kDa) .



Detection limit for recombinant GST tagged ATP2B1 is approximately 0.3ng/ml as a capture antibody.

#### ATP2B1 Antibody (monoclonal) (M01) - Background

The protein encoded by this gene belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and play a critical role in intracellular calcium homeostasis. The mammalian plasma membrane calcium ATPase isoforms are encoded by at least four separate genes and the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of different isoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumps are functionally adapted to the physiological needs of particular cells and tissues. This gene encodes the plasma membrane calcium ATPase isoform 1. Alternatively spliced transcript variants encoding different isoforms have been identified.

#### ATP2B1 Antibody (monoclonal) (M01) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey

SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Blood pressure and hypertension are associated with 7 loci in the Japanese population. Takeuchi F, et al. Circulation, 2010 Jun 1. PMID 20479155. Recapitulation of two genomewide association studies on blood pressure and essential hypertension in the Korean population. Hong KW, et al. J Hum Genet, 2010 Jun. PMID 20414254. Genetic variations in ATP2B1, CSK, ARSG and CSMD1 loci are related to blood pressure and/or hypertension in two Korean cohorts. Hong KW, et al. J Hum Hypertens, 2010 Jun. PMID 19960030. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

**ATP2B1 Antibody (monoclonal) (M01) - Citations**

- [Regulation of Intestinal Epithelial Calcium Transport Proteins by Stanniocalcin-1 in Caco2 Cells.](#)