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ATP2B1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ATP2B1.
Catalog # AT1235a

Product Information

Application	WB, E
Primary Accession	P20020
Other Accession	NM_001682
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3E3
Calculated MW	134685

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.

Background

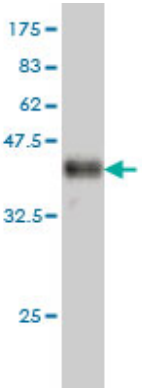
The protein encoded by this gene belongs to the family of P-type primary ion transport ATPases characterized by the formation of an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cells against very large concentration gradients and 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.

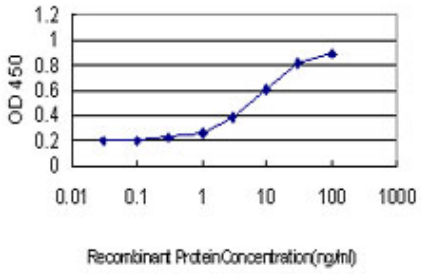
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-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.

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.

Citations

- Regulation of Intestinal Epithelial Calcium Transport Proteins by Stanniocalcin-1 in Caco2 Cells.