AT2B2 Polyclonal Antibody

Catalog No	YP-Ab-05935
Isotype	IgG
Reactivity	Human;Rat
Applications	WB;ELISA
Gene Name	ATP2B2 PMCA2
Immunogen	Synthesized peptide derived from human protein . at AA range: 250-330
Specificity	AT2B2 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP2B2;PMCA2;PMCA2a;PMCA2i;AT2B2;ATP2B2 PMCA2;Plasma membrane calcium-transporting ATPase 2 (PMCA2) (EC 3.6.3.8) (Plasma membrane calcium ATPase isoform 2) (Plasma membrane calcium pump isoform 2)
Observed Band	137 kDa
Calculated Molecular Weight	139 kDa
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cell junction, synapse .; [Isoform WA]: Apical cell membrane ; Multi-pass membrane protein . Basolateral cell membrane ; Multi-pass membrane protein .; [Isoform WB]: Apical cell membrane ; Multi-pass membrane protein . Basolateral cell membrane ; Multi-pass membrane protein .; [Isoform XB]: Basolateral cell membrane ; Multi-pass membrane protein .; [Isoform ZA]: Basolateral cell membrane ; Multi-pass membrane protein .; [Isoform ZB]: Basolateral cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Mainly expressed in brain cortex. Found in low levels in skeletal muscle, heart muscle, stomach, liver, kidney and lung. Isoforms containing segment B are found in brain cortex and at low levels in other tissues. Isoforms containing segments X and W are found at low levels in all tissues. Isoforms containing segment A and segment Z are found at low levels in skeletal muscle and heart muscle.

Function	alternative products:There is a combination of two alternative spliced domains at N-terminal site A (W, X and Z) and at C-terminal site C (A and B). So far the splice sites have only been studied independently. Experimental confirmation may be lacking for some isoforms,catalytic activity:ATP + H(2)O + Ca(2+)(Cis) = ADP + phosphate + Ca(2+)(Trans).,function:This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell.,similarity:Belongs to the cation transport ATPase (P-type) family., similarity:Belongs to the cation transport ATPase (P-type) family. Type IIB subfamily.,tissue specificity:Mainly expressed in brain cortex. Found in low levels in skeletal muscle, heart muscle, stomach, liver, kidney and lung. Isoforms containing segment B are found in brain cortex and at low levels in other tissues. Isoforms containing segments X and W
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 2. Alternatively spliced tran
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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