



AT2B3 Monoclonal Antibody

Catalog No	YP-mAb-05936
Isotype	IgG
Reactivity	Human;Rat
Applications	WB
Gene Name	ATP2B3
Protein Name	Plasma membrane calcium-transporting ATPase 3 (PMCA3) (EC 3.6.3.8) (Plasma membrane calcium ATPase isoform 3) (Plasma membrane calcium pump isoform 3)
Immunogen	Synthesized peptide derived from human protein . at AA range: 140-220
Specificity	AT2B3 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	134kD
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Cell junction, synapse, presynaptic cell membrane ; Multi-pass membrane protein . Localized at parallel fiber terminals. .
Tissue Specificity	Highly expressed in the cerebellum (PubMed:8187550). Expressed in adrenal glands (PubMed:27035656).
Function	alternative products:There is a combination of two alternatively spliced domains at N-terminal site A (X and Z) and at C-terminal site C (A, B, E and G). The splice sites have mostly been studied independently. Full isoforms so far detected are isoform XA and isoform XB. 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. Type IIB subfamily.,tissue specificity:Isoforms XE and XB are the most abundant isoforms and are detected at low levels in brain and fetal skeletal muscle. The other isoforms are only found at lower levels and not in fetal tissues.,

**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 3. 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.

Products Images