

Recombinant Human ATP2B4

Cat. No. ATP2B4-27795TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human Calcium Pump PMCA4 ATPase with a N terminal proprietary tag: predicted molecular weight 35.75 kDa.
Species	Human
Source	Wheat Germ
ProteinLength	92 amino acids
Description	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 4. Alternatively spliced transcript variants encoding different isoforms have been identified.
Molecular Weight	35.750kDa inclusive of tags
Tissue specificity	Isoform XB is the most abundant isoform and is expressed ubiquitously. Isoforms

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	containing segment Z have only been detected in heart, while isoforms containing segment a have been found in heart, stomach and brain cortex.
Form	Liquid
Purity	Proprietary Purification
Storage buffer	pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MTNPSDRVLPANSMAESREGDFGCTVMELRKLME LR SRDALTQINVHYGGVQNLC SRLKTSPVEGLSGNPADLEKRRQVFGHNVIPPKPKT*
Sequence Similarities	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IIB subfamily.

GENE INFORMATION

Gene Name	ATP2B4 ATPase, Ca++ transporting, plasma membrane 4 [Homo sapiens]
Official Symbol	ATP2B4
Synonyms	ATP2B4; ATPase, Ca++ transporting, plasma membrane 4; ATP2B2, matrix remodelling associated 1 , MXRA1; plasma membrane calcium-transporting ATPase 4; plasma membrane calcium transporting ATPase 4; PMCA4;
Gene ID	493
mRNA Refseq	NM_001001396

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Protein Refseq	NP_001001396
MIM	108732
Uniprot ID	P23634
Chromosome Location	1q32.1
Pathway	B Cell Receptor Signaling Pathway, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Hemostasis, organism-specific biosystem; Ion channel transport, organism-specific biosystem;
Function	ATP binding; PDZ domain binding; calcium-transporting ATPase activity; calmodulin binding; hydrolase activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA