Recombinant Human ATPase, Ca++ transporting, plasma membrane 1 Protein, His tagged

Cat. No. ATP2B1-127H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PMCA1/ATP2B1 protein (P20020) (Thr 481-Asp 684) with a His tag at the C-terminus was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	481-684aa
Description	Catalyzes the hydrolysis of ATP coupled with the transport of calcium from the cytoplasm to the extracellular space thereby maintaining intracellular calcium homeostasis. Plays a role in blood pressure regulation through regulation of intracellular calcium concentration and nitric oxide production leading to regulation of vascular smooth muscle cells vasoconstriction. Positively regulates bone mineralization through absorption of calcium from the intestine. Plays dual roles in osteoclast differentiation and survival by regulating RANKL-induced calcium oscillations in preosteoclasts and mediating calcium extrusion in mature osteoclasts. Regulates insulin sensitivity through calcium/calmodulin signaling pathway by regulating AKT1 activation and NOS3 activation in endothelial cells.
Tag	C-His
Molecular Mass	24.5 kDa

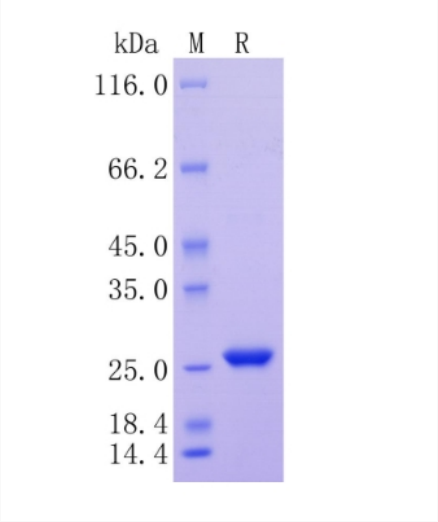
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Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	ATP2B1 ATPase, Ca++ transporting, plasma membrane 1 [Homo sapiens (human)]
Official Symbol	ATP2B1
Synonyms	ATP2B1; ATPase, Ca++ transporting, plasma membrane 1; plasma membrane calcium-transporting ATPase 1; plasma membrane calcium transporting ATPase 1; PMCA1; plasma membrane calcium pump; PMCA1kb;
Gene ID	490
mRNA Refseq	NM_001001323
Protein Refseq	NP_001001323
MIM	108731

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UniProt ID	P20020
Protein on SDS-PAGE under reducing (R) condition.	

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