Recombinant Human ATP1A2, His-tagged

Cat. No. ATP1A2-10005H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ATP1A2 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	347-700a.a.
Description	The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na+/K+ -ATPases. Na+/K+ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na+/K+ -ATPase is encoded by multiple genes. This gene encodes an alpha 2 subunit. Mutations in this gene result in familial basilar or hemiplegic migraines, and in a rare syndrome known as alternating hemiplegia of childhood.
Storage	The protein is stored in PBS buffer at -20℃. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na2HPO4,17mM NaH2PO4, 68mM NaCl, pH8.) added with 300mM

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	Imidazole and 0.7% Sarcosyl, 15%glycerol.

GENE INFORMATION

Gene Name	ATP1A2 ATPase, Na+/K+ transporting, alpha 2 polypeptide [Homo sapiens]
Official Symbol	ATP1A2
Synonyms	ATP1A2; ATPase, Na+/K+ transporting, alpha 2 polypeptide; ATPase, Na+/K+ transporting, alpha 2 (+) polypeptide , MHP2, migraine, hemiplegic 2; sodium/potassium-transporting ATPase subunit alpha-2; FHM2; sodium-potassium ATPase; sodium pump subunit alpha-2; Na(+)/K(+) ATPase alpha-2 subunit; Na+/K+ ATPase, alpha-B polypeptide; Na+/K+ ATPase, alpha-A(+) catalytic polypeptide; sodium/potassium-transporting ATPase alpha-2 chain; MHP2; MGC59864;
Gene ID	477
mRNA Refseq	NM_000702
Protein Refseq	NP_000693
MIM	182340
UniProt ID	P50993
Chromosome Location	1q21-q23
Pathway	Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem; Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Carbohydrate

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	digestion and absorption, organism-specific biosystem; Carbohydrate digestion and absorption, conserved biosystem; Cardiac muscle contraction, organism-specific biosystem;
Function	ATP binding; ATPase activity, coupled to transmembrane movement of ions, phosphorylative mechanism; cation-transporting ATPase activity; hydrolase activity; hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances; me

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