

Recombinant Human ATP1B1 protein, His-tagged

Cat. No. ATP1B1-2279H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ATP1B1(63 - 303aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	63-303 a.a.
Description	ATP1B1 belongs to the family of Na⁺/K⁺ and H⁺/K⁺ ATPases beta chain proteins, 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 beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. ATP1B1 is a beta 1 subunit.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea
Molecular Mass	30.4kDa (264aa)

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AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSEFKPTYQ DRVAPPGLTQ IPQIQKTEIS FRPNDPKSYE AYVLNIVRFL EKYKDSAQRD DMIFEDCGDVPSEPKERGDF NHERGERKVC RFKLEWLGNC SGLNDETYGY KEGKPCIIK LNRVLGFKPK PPKNESLETY PVMKYNPVNL PVQCTGKRDEDKDKVGNVEY FGLGNSPGFP LQYYPPYGGKL LQPKYLQPLL AVQFTNLTMD TEIRIECKAY GENIGYSEKD RFQGRFDVKI EVKS
Purity	> 90% by SDS - PAGE
Storage	Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	1.0 mg/ml (determined by Bradford assay)
GENE INFORMATION	
Gene Name	ATP1B1 ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide [Homo sapiens]
Official Symbol	ATP1B1
Synonyms	ATP1B1; ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide; ATP1B; sodium/potassium-transporting ATPase subunit beta-1; adenosinetriphosphatase; Na, K-ATPase beta-1 polypeptide; Beta 1-subunit of Na(+),K(+)-ATPase; sodium/potassium-dependent ATPase beta-1 subunit; sodium/potassium-transporting ATPase beta-1 chain; MGC1798;
Gene ID	481
mRNA Refseq	NM_001677

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Protein Refseq	NP_001668
MIM	182330
UniProt ID	P05026
Chromosome Location	1q22-q25
Pathway	Aldosterone-regulated sodium reabsorption, organism-specific biosystem; Aldosterone-regulated sodium reabsorption, conserved biosystem; Basigin interactions, organism-specific biosystem; Bile secretion, organism-specific biosystem; Bile secretion, conserved biosystem; Calcium Regulation in the Cardiac Cell, organism-specific biosystem; Carbohydrate digestion and absorption, organism-specific biosystem;
Function	protein binding; sodium:potassium-exchanging ATPase activity;

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