

Recombinant Human ATP1A1, His-tagged

Cat. No. ATP1A1-10004H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ATP1A1 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	346-680a.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 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 300mM Imidazole and 0.7% Sarcosyl, 15%glycerol.

 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

GENE INFORMATION

Gene Name [ATP1A1 ATPase, Na+/K+ transporting, alpha 1 polypeptide \[Homo sapiens \]](#)

Official Symbol [ATP1A1](#)

Synonyms [ATP1A1](#); ATPase, Na⁺/K⁺ transporting, alpha 1 polypeptide; sodium/potassium-transporting ATPase subunit alpha-1; sodium pump 1; Na⁺/K⁺ ATPase 1; Na,K-ATPase alpha-1 subunit; sodium pump subunit alpha-1; Na⁺, K⁺ ATPase alpha subunit; Na(+)/K(+) ATPase alpha-1 subunit; Na, K-ATPase, alpha-A catalytic polypeptide; sodium-potassium-ATPase, alpha 1 polypeptide; Na,K-ATPase catalytic subunit alpha-A protein; MGC3285; MGC51750;

Gene ID [476](#)

mRNA Refseq [NM_000701](#)

Protein Refseq [NP_000692](#)

MIM [182310](#)

UniProt ID [P05023](#)

Chromosome Location [1p13](#)

Pathway [Aldosterone-regulated sodium reabsorption, organism-specific biosystem](#); [Aldosterone-regulated sodium reabsorption, conserved biosystem](#); [Bile secretion, organism-specific biosystem](#); [Bile secretion, conserved biosystem](#); [Carbohydrate digestion and absorption, organism-specific biosystem](#); [Carbohydrate digestion and absorption, conserved biosystem](#); [Cardiac muscle contraction, organism-specific](#)

 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



biosystem;

Function

4-nitrophenylphosphatase activity; ATP binding; ATPase activity, coupled to transmembrane movement of ions, phosphorylative mechanism; hydrolase activity; hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances; meta

 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