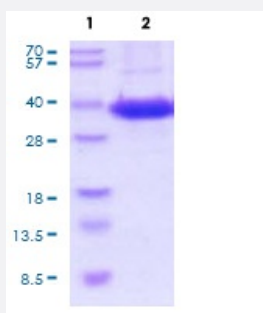


Bioactive

ATP1B1 (Human) Recombinant Protein

Catalog # P8003 Size 250 ug

Applications



Specification

Product Description	Human ATP1B1 (P05026, 63 a.a. - 303 a.a.) partial length recombinant protein with His tag expressed in Baculovirus expression system.
Sequence	EFKPTYQDRVAPPGLTQIPQIQKTEISFRPNDPKSYEAYVLNVRFLKYKDSAQRDDMIFEDCGDV PSEPKERGFDFNHERGERKVCRFKLEWLGNCGLNDETYGYKEGKPCIIKLNRVLGFKPKPPKNE SLETYPVMKYNPNVLPVQCTGKRDEDDKDKVGNVEYFGLGNSPGFPLQYYPPYGKLLQPKYLQPLL AVQFTNLTMDTEIRIECKAYGENIGYSEKDRFQGRFDVKIEVKS
Host	Viruses
Theoretical MW (kDa)	29
Form	Liquid
Preparation Method	Baculovirus expression system
Purity	> 90% by SDS-PAGE
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	Specific activity is > 3000 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 p mole of Adenosine 5-triphosphate to phosphate per minute per minute at pH 7.5 at 25°C.
Quality Control Testing	3 ug by SDS-PAGE under reducing condition and visualized by Coomassie blue stain.

Storage Buffer

In Phosphate-Buffer Saline pH 7.4 (10% glycerol)

Storage Instruction

Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — ATP1B1

Entrez GeneID

[481](#)

Protein Accession#

[P05026](#)

Gene Name

ATP1B1

Gene Alias

ATP1B, MGC1798

Gene Description

ATPase, Na⁺/K⁺ transporting, beta 1 polypeptide

Omim ID

[145500](#) [182330](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene 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 in subunit of Na⁺/K⁺ -ATPase is encoded by multiple genes. This gene encodes a beta 1 subunit. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq]

Other Designations

Beta 1-subunit of Na(+),K(+)-ATPase|Na⁺/K⁺ -ATPase beta 1 subunit|Na, K-ATPase beta-1 polypeptide|Na,K-ATPase beta 1 subunit|OTTHUMP00000032537|OTTHUMP00000032538|adenosinetriphosphatase|sodium/potassium-dependent ATPase beta-1 subunit|sodium/potassium-tr

Pathway

- [Cardiac muscle contraction](#)

Disease

- [Adenocarcinoma](#)
- [Arrhythmias](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Graves Disease](#)
- [Hypertension](#)
- [Hypokalemic Periodic Paralysis](#)
- [Long QT syndrome](#)
- [Osteoporosis](#)