

Product information



ATP1B1, 63 - 303aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP2279

Full name: Sodium/potassium-transporting ATPase subunit beta-1

NCBI Accession No.: NP_001668

Synonyms: ATPase, Na⁺/K⁺ transporting, beta 1 polypeptide, ATP1B, ATPBS

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. Recombinant human ATP1B1 protein, fused to His-tag at N-terminus, was expressed in *E.coli*.

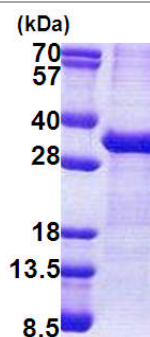
Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing

10% glycerol, 0.4M Urea

Molecular Weight: 30.4kDa (264aa)

Purity: > 90% by SDS - PAGE

Concentration: 1.0 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSEFKPTYQ DRVAPPGLTQ IPQIQKTEIS FRPNPKSYE AYVLNIVRFL EKYKDSAQRD DMIFEDCGDV
PSEPKERGDF NHERGERKVC RFKLEWLGNC SGLNDETYGY KEGKPCIIIK LNRVLGFKPK PPKNESLETY PVMKYNPNVL PVQCTGKRDE
DKDKVGNVEY FGLGNSPGFP LQYYPYGYKL LQPKYLQPLL AVQFTNLTMD TEIRIECKAY GENIGYSEKD RFQGRFDVKI EVKS

General references:

Lanciotti A., *et al.* (2012) *Hum. Mol. Genet.* 21:2166-2180

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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