Recombinant human ATP1B1 protein

Catalog Number: ATGP2279

PRODUCT INFORMATION

Expression system
E.coli

Domain
63-303aa

UniProt No.
P05026

NCBI Accession No.
NP_001668

Alternative Names
Sodium/potassium-transporting ATPase subunit beta-1, ATPase, Na+/K+ transporting, beta 1 polypeptide, ATP1B, ATPBS

PRODUCT SPECIFICATION

Molecular Weight
30.4 kDa (264aa)

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea

Purity
> 90% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE,Denatured

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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

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(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.

Amino acid Sequence

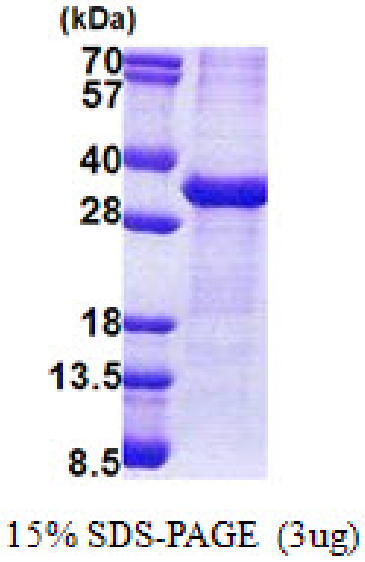
MGSSHHHHHH SSGLVPRGSH MGSEFKPTYQ DRVAPPGLTQ IPQIQKTEIS FRPNDPKSYE AYVLNIVRFL EKYKDSAQRD DMIFEDCGDV PSEPKERGDF NHERGERKVC RFKLEWLGNC SGLNDETYGY KEGKPCIIIK LNRVLGFKPK PPKNESLETY PVMKYNPNVL PVQCTGKRDE DKDKVGNVEY FGLGNSPGFP LQYYPYYGKL LQPKYLQPLL AVQFTNLTMD TEIRIECKAY GENIGYSEKD RFQGRFDVKI EVKS

General References

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

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.