

Product datasheet for PH301009

Sodium Potassium ATPase (ATP1A1) (NM_000701) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	ATP1A1 MS Standard C13 and N15-labeled recombinant protein (NP_000692)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC201009
Predicted MW:	112.9 kDa
Protein Sequence:	>RC201009 protein sequence Red=Cloning site Green=Tags(s)

MGKGVGRDKYEPAAVSEQGDKKGKGGKDRDMDLKEVSMDDHKLSDDELHRKYGTDLSRGLTSARAAE
ILARDGPNALTPPPTPEWIKFCRQLFGGFSMLLWIGAILCFLAYSIIQAATEEPEQNDNL YLGVVLSAVV
IITGCFSSYYQEAQSSKIMESFKNMVPPQALVIRNGEKMSINAEEVVVGDLEVKGGDRIPADLRISANG
CKVDNSSLTGESEPQTRSPDFTNENPLETRNIAFFSTNCVEGTARGIVVYTGDRIVMGRIATLASGLEGG
QTPIAAEIEHFIHITGVAVFLGVSFFILSLILEYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKR
MARKNCLVKNLEAVETLSTSTICSDKTGTLTQNRMTVAHMMWFDNQIHEADTTENQSGVSFDKTSATWLA
LSRIAGLCNRAVFQANQENLPIKRAVAGDASESALLKCIELCCGSKEMRERYAKIVEIPFNSTNKYQL
SIHKNPNTSEPHLLVMKGAPERILDRCSSILLHGKEQPLDEELKDAFQNAYLELGGGLGERVLGFCHLFL
PDEQFPEGFQFDTDDVNFPIIDNLCFVGLISMIDPPRAAVPDAVKGCRSAGIKVIMVTDGHPITAKAIKAG
VGIISEGNETVEDIAARLNIPVSQVNPRAKACVVHGSCLKDMTSEQLDDILKYHTEIVFARTSPQKLI
IVEGCQRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRILFD
NLKKSIAIYTLTSNIPEITPFLIFIIANIPLPLGTVTILCIDLGTDMVPAISLAYEQAESDIMKRQPRNPK
TDKLVNERLISMAYGQIGMIQALGGFFTYFVILAENGFLPIHLLGLRVDWDRWINDVEDSYGQQWTYEQ
RKIVEFTCHTAFFVSIVVQWADLVICKTRRNSVFOQGMKNKILIFGLFEETALAAFLSYCPGMGVALRM
YPLKPTWWFCAPYSLLIFVYDEVKLIIRRRPGGWVEKETYY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

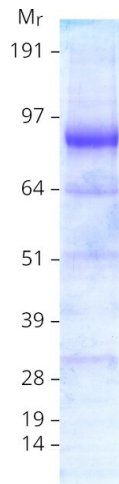
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.



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Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000692
RefSeq Size:	3754
RefSeq ORF:	3069
Synonyms:	CMT2DD; HOMGSMR2
Locus ID:	476
UniProt ID:	P05023
Cytogenetics:	1p13.1
Summary:	<p>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. [provided by RefSeq, May 2009]</p>
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cardiac muscle contraction

Product images:



Coomassie blue staining of purified ATP1A1 protein (Cat# [TP301009]). The protein was produced from HEK293T cells transfected with ATP1A1 cDNA clone (Cat# [RC201009]) using MegaTran 2.0 (Cat# [TT210002]).