

Product datasheet for **TP301009M**

Sodium Potassium ATPase (ATP1A1) (NM_000701) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide (ATP1A1), transcript variant 1, 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC201009 protein sequence Red =Cloning site Green =Tags(s)

MGKGVGRDKYEPAAVSEQGDKKGGKGGKDRDMDELKKEVSMDDHKLSDLDELHRKYGTDLSRGLTSARAAE
ILARDGPNALTPPPTTPEWIKFCRQLFGGFSMLLWIGAILCFLAYSIIQAATEEEPQNDNLYLGVVLSAVV
IITGCFSYQEAQSSKIMESFKNMVPQQALVIRNGEKMSINAEVVGDLVEVKGGDRIPADLRIISANG
CKVDNSSLTGESEPQTRSPDFTNENPLETRNIAFFSTNCVEGTARGIVVYTGDRVTMGRIATLASGLEGG
QTPIAAEIEHFIHITGVAVFLGVSFFILSLILEYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKR
MARKNCLVKNLEAVETLGGSTSTICSDKTGTLTQNRMTVAHMFWDNQIHEADTTENQSGVSFDKTSATWLA
LSRIAGLCNRAVFQANQENLPILKRAVAGDASESALLKCIELCCGSVKEMRERYAKIVEIPFNSTNKYQL
SIHKNPNTSEPHLLVMKGAAPERILDRCSSILLHGKEQPLDEELKDAFQNAYLELGGGLGERVLGFCHLFL
PDEQFPEGFQFDTDDVNFIDNLCFVGLISMIDPPRAAVPDAVGKCRSAGIKVIMVTGDHPITAKAIKAG
VGIISEGNETVEDIAARLNIPVSQVNPRDAKACVHGSDDLKDMTSEQLDDILKYHTEIVFARTSPQQKLI
IVEGCQRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRILFD
NLKKSIAAYTLTSNIPEITPFLIFIANIPLPLGTVTILCIDLGTDMVPAISLAYEQAESDIMKRQPRNPK
TDKLVNERLISMAYGQIGMIQALGGFFTYFVILAENGFLPIHLLGLRVDWDDRWINDDVEDSYGQQWTYEQ
RKIVEFTCHTAFFVSIVVQWADLVICKTRRNSVFQQGMKNKILIFGLFEETALAAFLSYCPGMGVALRM
YPLKPTWWFCAFPYSLLIFVYDEVRKLIIRRRPGGWVEKETYY

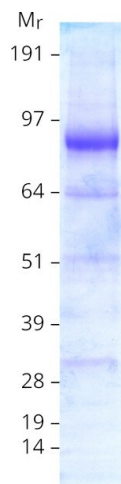
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	112.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000692
Locus ID:	476
UniProt ID:	P05023
RefSeq Size:	3754
Cytogenetics:	1p13.1
RefSeq ORF:	3069
Synonyms:	CMT2DD; HOMGSMR2
Summary:	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]
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]).