

Product datasheet for **RG201009**

Sodium Potassium ATPase (ATP1A1) (NM_000701) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sodium Potassium ATPase (ATP1A1) (NM_000701) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP1A1
Synonyms:	CMT2DD; HOMGSMR2
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RG201009 representing NM_000701 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**GCGATCGC**C

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Protein Sequence:

>RG201009 representing NM_000701
 Red=Cloning site Green=Tags(s)

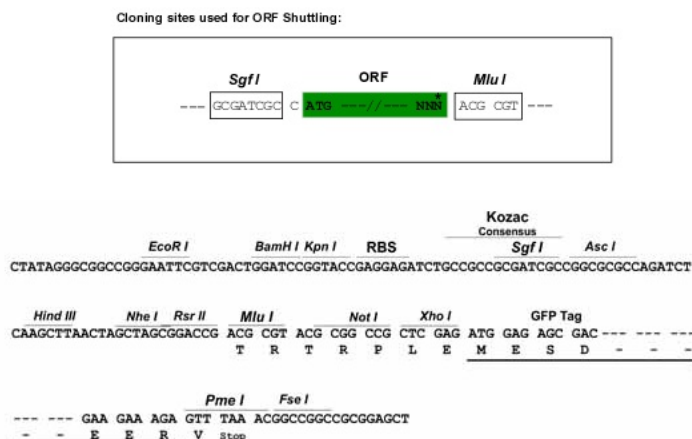
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TRTRPLE - GFP Tag - V

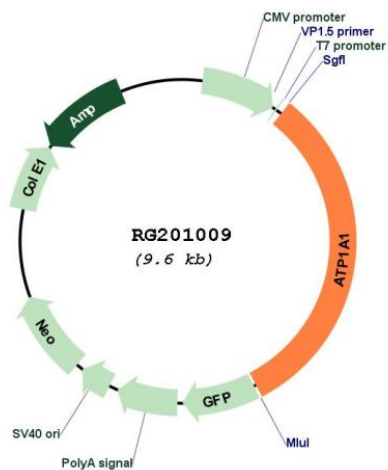
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000701
 ORF Size: 3069 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_000701.6 , NP_000692.2
RefSeq Size:	3713 bp
RefSeq ORF:	3072 bp
Locus ID:	476
Cytogenetics:	1p13.1
Domains:	E1-E2_ATPase, Cation_ATPase_N, Hydrolase, Cation_ATPase_C
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cardiac muscle contraction
Gene 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]