

Product datasheet for **RG239712**

ATP2A1 (NM_001286075) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP2A1 (NM_001286075) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ATP2A1
Synonyms:	ATP2A; SERCA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG239712 representing NM_001286075.
 Blue=ORF Red=Cloning site Green=Tag(s)

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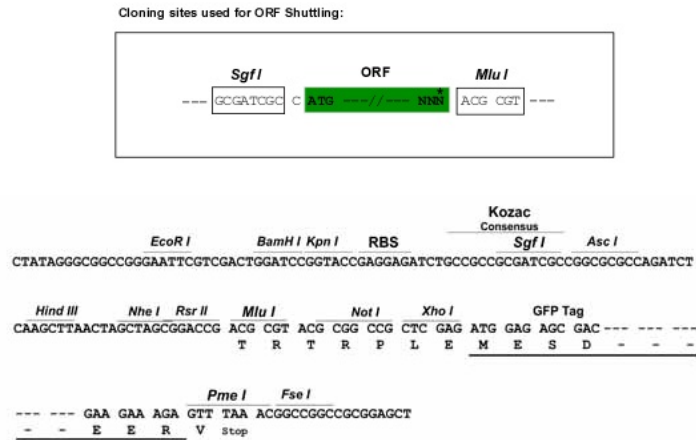
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GTCATTGGGCTCGACGAAATCCTCAAGTTCGTTGCTCGGAACTACCTAGAGGGA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
  
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Protein Sequence: >Peptide sequence encoded by RG239712
 Blue=ORF Red=Cloning site Green=Tag(s)

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MGKVYRADRKSQRIKARDIVPGDIVEVAVGDKVPADIRILAIKSTTLRVDQSILTGESVSVIKHTEPV
PDPRAVNQDKKNMLFSGTNIAAGKALGIVATTGVGTEIGKIRDQMAATEQDKTPLQQKLEDFGEQLSKV
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PVKEKIMAVIKEWGTGRDTRLRCLALATRDTPPKREEMVLDD SARFLEYETDLTFVGVVGM LDP PRKEVT
GSIQLCRDAGIRVIMITGDNKGT AIAICRRIGIFGENEEVADRAYTGREFDDLPLAEQREACRRACCF A
RVEPSHKSKIVEYLQSYDEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKTASEMVLADDNFSTIVAA
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Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_001286075

ORF Size: 2607 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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

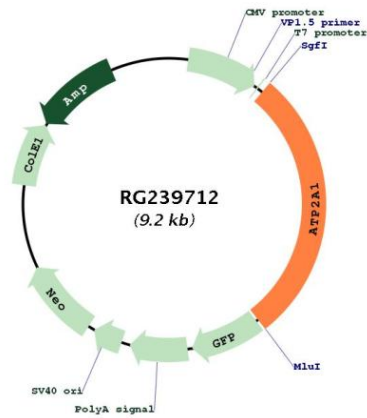
RefSeq: [NM_001286075.1](#), [NP_001273004.1](#)

RefSeq Size: 3219 bp

RefSeq ORF: 2610 bp

Locus ID: 487
UniProt ID: [O14983](#)
Cytogenetics: 16p11.2
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Alzheimer's disease, Calcium signaling pathway
MW: 95.6 kDa
Gene Summary: This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in three transcript variants encoding different isoforms. [provided by RefSeq, Oct 2013]

Product images:



Circular map for RG239712