

## Product datasheet for RC221445

### ATP8A2 (NM\_016529) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ATP8A2 (NM_016529) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP8A2
Synonyms:	ATP; ATP1B; CAMRQ4; IB; ML-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC221445 representing NM_016529 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC221445 representing NM\_016529  
 Red=Cloning site Green=Tags(s)

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```

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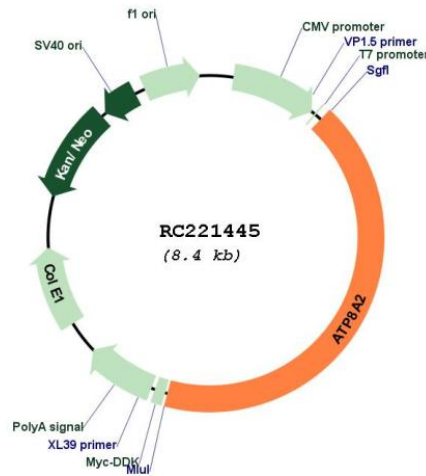
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_016529

ORF Size: 3564 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_016529.6](#)

RefSeq Size: 5006 bp

RefSeq ORF: 3567 bp

Locus ID: 51761

UniProt ID: [Q9NTI2](#)

Cytogenetics: 13q12.13

**Protein Families:** Transmembrane

**MW:** 133.4 kDa

**Gene Summary:** The protein encoded by this gene is a member of the P4 ATPase family of proteins, which are thought to be involved in a process called lipid flipping, whereby phospholipids are translocated inwards from the exoplasmic leaflet to the cytosolic leaflet of the cell membrane, which aids in generating and maintaining asymmetry in membrane lipids. This protein is predicted to contain an E1 E2 ATPase, a haloacid dehalogenase-like hydrolase (HAD) domain, and multiple transmembrane domains. Associations between this protein and cell cycle control protein 50A are important for translocation of phosphatidylserine across membranes. Mutations in this gene have been associated with a syndrome (CAMRQ4) characterized by cerebellar ataxia and cognitive disabilities. In addition, a translocation breakpoint within this gene was observed in an individual with neurological dysfunction. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2017]