

## Product datasheet for **MG222074**

### Arfrp1 (NM\_029702) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Arfrp1 (NM\_029702) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Arfrp1  
**Synonyms:** 1500006I01Rik; AI480700  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG222074 representing NM\_029702  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTACACGCTGCTTTCGGGATTGTACAAGTACATGTTCCAGAAGGATGAATACTGCATCCTGATCCTGG  
 GCCTGGACAATGCTGGGAAGACGACTTTCCTGGAACAGTCAAAAACACGCTTTAAACAAGAACTACAAGG  
 GATGAGTCTATCCAAAATCACCCTACCGTGGTCTAAACATTGGCACTGTGGACGTGGAAAGGCTCGT  
 CTCATGTTTTGGACTTAGGTGGCAGGAAGAGCTGCAGTCTTTGTGGACAAGTACTATGCAGAGTGCC  
 ATGGTGCATCTATGTAATTGATTCCACTGATGAAGAAAGGCTGTCAGAATCAAAAGAGGCATTTGAGAA  
 GGTGGTTTCGAGTGAAGCACTGGACGGTGTCCCATCCTGGTGTGGCCAACAAGCAGGATGTGGAGACT  
 TGCCCTCCATTCTGACATCAAGACTGCATTCAGTACTGTACCTGTAAGATTGCCCGGCGAGATTGTC  
 TGACCCAGGCCTGCTCTGCCCTCACAGGCAAAGGATTCGAGAGGGCATCGAATGGATGGTGAAGTGTGT  
 CGTGCGGAATGTTACCGGCCACCACGGCAGAGGGACATCACA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

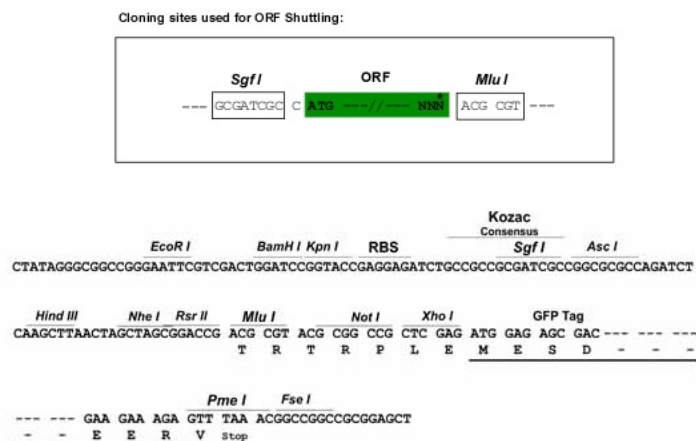
**Protein Sequence:** >MG222074 representing NM\_029702  
 Red=Cloning site Green=Tags(s)

MYTLLSGLYKYMFKDEYICILILGLDNAGKTFLEQSKTRFNKNYKMSLSKITTTVGLNIGTVDVGKAR  
 LMFWDLGGQEELQSLWDKYAECHEGVIYVIDSTDEERLSESKEAFEKVVSEALDGVPIILVLANKQDVET  
 CLSIPDIKTAFSCTCKIGRRDCLTQACSALTGKGVREGIEWMVKCVVRNVHRPPRQDIT

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_029702

**ORF Size:** 603 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\\_029702.4](#), [NP\\_083978.3](#)

**RefSeq Size:** 2590 bp

**RefSeq ORF:** 606 bp

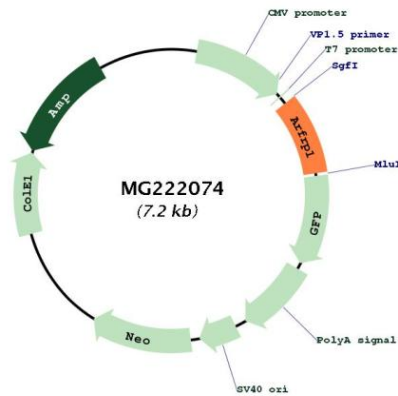
**Locus ID:** 76688

**UniProt ID:** [Q8BXL7](#)

**Cytogenetics:** 2 H4

**Gene Summary:**

The gene encodes a membrane-associated GTPase that is related to the ADP-ribosylation factor (ARF) and ARF-like (ARL) genes. It plays an essential role in Golgi function controlling recruitment of GRIP domain proteins and ARL1 to the trans-Golgi and trans-Golgi to plasma membrane trafficking of cell surface proteins such as E-cadherin. Deletion of this gene in mice leads to embryonic lethality during early gastrulation, which is at least partly caused by the disruption of E-cadherin trafficking to the cell surface and therefore lack of sufficient cell-cell adhesion in the embryo. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

**Product images:**


Circular map for MG222074