

Product datasheet for **RN217698**

Arfgef1 (NM_001277056) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arfgef1 (NM_001277056) Rat Untagged Clone
Tag: Tag Free
Symbol: Arfgef1
Synonyms: BIG1; RGD1560793
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN217698 representing NM_001277056
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTATGAGGGCAAGAAGACGAAGAACATGTTCTGACCCGGCCCTGGAGAAGATTTGGCCGACAAGG
 AAGTGAAGAAGGCGCATCACTCCAGCTGCGCAAAGCGTGGAGGTGGCCCTAGAGGAAAATAAAGTTGA
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ACTGCGCATCCTCTTCCGGATGTACACAGACGAGAGCAGAGTCAGCGCCTGGGAGGAGGTCCAGCAGAGG
 CTTTTAAACGTCTGCAGTGAGGCACTGAGTTACTTCTCACTCTAACATCTGAAAGTCACCGGAAGCCT
 GGACCAACTTACTGTTACTGTTCTCACTAAAGTCCTCAAGATCAGTGACAACAGGTTTAAAGCTCACGC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001277056
- Insert Size:** 5541 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001277056.1](#), [NP_001263985.1](#)
- RefSeq Size:** 6945 bp
- RefSeq ORF:** 5541 bp
- Locus ID:** 312915
- UniProt ID:** [D4A631](#)
- Cytogenetics:** 5q11

Gene Summary:

Promotes guanine-nucleotide exchange on ARF1 and ARF3. Promotes the activation of ARF1/ARF3 through replacement of GDP with GTP. Involved in vesicular trafficking. Required for the maintenance of Golgi structure; the function may be independent of its GEF activity. Required for the maturation of integrin beta-1 in the Golgi. Involved in the establishment and persistence of cell polarity during directed cell movement in wound healing. Proposed to act as A kinase-anchoring protein (AKAP) and may mediate crosstalk between Arf and PKA pathways. Inhibits GAP activity of MYO9B probably through competitive RhoA binding. The function in the nucleus remains to be determined (By similarity).[UniProtKB/Swiss-Prot Function]