

Product datasheet for RN208780

Arfgef2 (NM_181083) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arfgef2 (NM_181083) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Arfgef2
Synonyms:	Big2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN208780 representing NM_181083 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGC**C

ATGCAGGAAAGCCAGACCAAGAGCATGTTTCGTGTCCCGGGCCCTGGAGAAGATCCTAGCTGACAAGGAGG
TGAAGCGGCCCCAGCACTCCCAGCTGCGTAGGGCTGCCAGGTGGCGCTCGATGAAATTAAGCAGA
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GTGCAGATGCCAGTGTGTTGTGGATATTTATGTCAACTACGACTGTGACTTAAATGCTGCTAACATTTT
 TGAGCGCTAGTAAATGATTTATCCAAAATCGCTCAGGGAAGAAGTGGACATGAACTGGGGATGACACCT
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 AACCGCAGGGATTCTGGGGCGAAAACAGCAGCGGCTTTTAAACCGTGTGCAGCGAAGCACTTGCCTATT
 TCATTACTGTGAACCTCTGAGAGCCATCGAGAAGCCTGGACGAGCTCCTCTCTCTTCAACCAAAAC

CCTCAAGATCAACGATGAAAAGTTCAAAGCCCACGCGTCAGTGTACTACCCCTACCTGTGTGAGATGATG
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AGATATGGGTTCCAGAAGAGCCATCGCAAGTGCCAGCGGCATCGACAGCATGGTAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-RsrII

ACCN: NM_181083

Insert Size: 5376 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).

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_181083.2](#), [NP_851597.2](#)

RefSeq Size: 5784 bp

RefSeq ORF: 5376 bp

Locus ID: 296380

UniProt ID: [Q7TSU1](#)

Cytogenetics: 3q42

Gene Summary: Promotes guanine-nucleotide exchange on ARF1 and ARF3 and to a lower extent on ARF5 and ARF6. Promotes the activation of ARF1/ARF5/ARF6 through replacement of GDP with GTP. Involved in the regulation of Golgi vesicular transport. Required for the integrity of the endosomal compartment. Involved in trafficking from the trans-Golgi network (TGN) to endosomes and is required for membrane association of the AP-1 complex and GGA1. Seems to be involved in recycling of the transferrin receptor from recycling endosomes to the plasma membrane. Probably is involved in the exit of GABA(A) receptors from the endoplasmic reticulum. Involved in constitutive release of tumor necrosis factor receptor 1 via exosome-like vesicles; the function seems to involve PKA and specifically PRKAR2B. Proposed to act as A kinase-anchoring protein (AKAP) and may mediate crosstalk between Arf and PKA pathways.[UniProtKB/Swiss-Prot Function]