

Product datasheet for **MG213940**

Arfgef2 (NM_001085495) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arfgef2 (NM_001085495) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Arfgef2
Synonyms: AI463430; AW493672; BIG2; E230011G24Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG213940 representing NM_001085495
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

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AACATTTTAGAAACATCCACAAGTTCTTTTGAGCACCGCTGGATGGTCATTCAGACCCTGACGAGGATTT
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AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence:

>MG213940 representing NM_001085495
 Red=Cloning site Green=Tags(s)

MQESQTKSMFVSRALKEILADKEVKRPQHSQLRACQVALDEIKAELEKQRLGAAAPPKANFIEADKYFL
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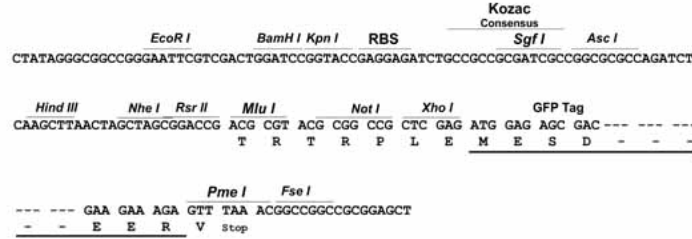
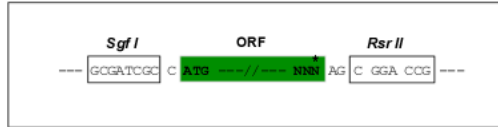
SGPTRRRLE - GFP Tag - V

Restriction Sites:

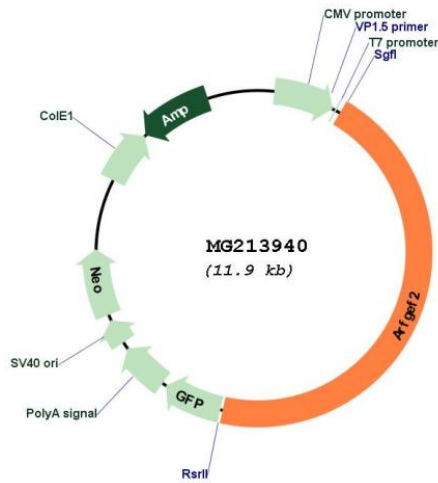
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN:	NM_001085495
ORF Size:	5376 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:	<ol style="list-style-type: none">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_001085495.2 , NP_001078964.1
RefSeq Size:	8777 bp
RefSeq ORF:	5379 bp
Locus ID:	99371
UniProt ID:	A2A5R2
Cytogenetics:	2 H3
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 (By similarity).[UniProtKB/Swiss-Prot Function]