

Product datasheet for **MG225967**

Arfgef1 (NM_001102430) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arfgef1 (NM_001102430) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arfgef1
Synonyms:	ARFGEP1; BIG1; D130059B05Rik; D730028O18Rik; P200
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225967 representing NM_001102430 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTATGAGGGCAAGAAGACGAAGAACATGTTCTGACCCGGGCCCTGGAGAAGATTCTGGCCGACAAGG
AAGTGAAGAAGGCGCATCACTCCAGCTGCGCAAAGCGTGCGAGGTGGCCCTAGAGGAAATAAAGTTGA
AACTGAGAAACAAAGCCCTCCTCATGGAGAAGCAAAGCTGGATCAGGCACCCTCCACCAGTGAATCA
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GTCTCATCTGTTCCAGAGGTTTTGAGCTTCTCTTTCCATATTTCTTACTTTGTTGTCAAACCTCAAGA
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 ATCATTCTACTACCCTCTTATGTGAAATTATGCAATTTGACTTGATCCGGAAGTCCGCTGCTGTTCTT
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 ACAGGCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225967 representing NM_001102430
 Red=Cloning site Green=Tags(s)

MYEGKTKNMFLTRALEKILADKEVKKAHHSQLRKACEVALEEIKVETEKQSPPHGEAKAGSGTLPPVKS
 KTNFIEADKYFLPFELACQSKCPRIVSTSLDCLQKLIAYGHLTGRAPDSTTPGKKLIDRIETICGCFQG
 PQTDEGVQLQIIKALLTAVTSQHIEIHEGTVLQAVRTCYNILASKNLIQTTAKATLTQMLNVIFARME
 NQALQEAKQMERERHRQQHLLQSPVSHHEPESPHLRYPQTVDHINQEHEGLDLEPQTHDVKSLQDDT
 EPENGSDISSAENEQTEADQATAAETLSKNDILYDGDYEEKPLDIVQSI VEEMVNIIVGDMGEGMAISAS
 TEGNTGTVEDGSDSENIQANGIPGTPISVAYTPSLPDDRLSVSSNDTQESGNSSGSPGAKFSHILQKDA
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 SDVLLDDIFAQLYWCVQQDNEQLARSGTNCLENVVILNGEKFTLEIWDKTCNCTLDIFKTTIPHALLTWR
 PTSGEAEPSPSAVSEKPLDAISQKSVDIHDSIQPRSSDNRQQAPLVSSTVSEEVSQVSTAKFPEQKL
 FAALLIKCVVQLELIQTIDNIVFFPATSKKEDAENLAAAQRDAVDFDVRVDTQDQGMYRFLTSQQLFKLL
 DCLLESHRFAKAFNSNNEQRTALWKAGFKGSKPNLLKQETSSLACGLRILFRMYMDESRSVAWEVQQR
 LLNVCREALS YFLT TSESHREAWTNLLLLFLTKVLKISDSRFKAHASFYPLLCEIMQFDLIPELRAVL
 RFFFLRIGIVFQISQPPEQELGINRQ

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

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_001102430.1 , NP_001095900.1
RefSeq Size:	7042 bp
RefSeq ORF:	5541 bp
Locus ID:	211673
UniProt ID:	G3X9K3
Cytogenetics:	1 A2
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]