

Product datasheet for **MG217542**

Arfgef3 (NM_001033258) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arfgef3 (NM_001033258) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arfgef3
Synonyms:	9630004D11; B930094H20Rik; BIG3; D10Bwg1379e; mKIAA1244
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217542 representing NM_001033258 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGATCCTGAGGAAGCTGCAGAGAGATGCGTCCGGGAGCAAATACAAAGCCATCAAAGAGAGCT
GCACCTGGGCCCTGAAACCCCTAGGTGGCTGGACTGTTGTGAAGATCCCTCCCCTGTTGAGGGA
GAAATGCTTGCTGCTCCAGTTGGCTTTGGAATCAAAAATGTGAAGCTGGCCCAACATGCTTTGGCA
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ACTCCATGGGAGTCAGGCAATGAGAGGAGCCCTGACATCAGCATCAGTGTACCACAGACACAGGCCAGA
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TGACATCCGAGTCCGTC AAGCTGTGAGGGAATGGCTGGGAAGAGTGGGCCGTGTCTATGACATCATCACT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG217542 representing NM_001033258
 Red=Cloning site Green=Tags(s)

MEEILRKLQRDASGSKYKAIKESCTWALETLGGLDVTVKIPPHLLREKCLLPLQLALESKNVLAQHALA
 GMQKLLSEERFVSMETDSDEKQLLNQILNAVKVTPSLNEDLQVEVMKVLCCITYTPTFDMNGSAVLKIAE
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 LELCDEDVQDQVVTISIGELVEVCSAQIQSGWRPLFSALETVRSGNKSEVKEYLVGDYSMGKGQAPVDFV
 EAFLENDNIQVFANAATSYIMCLMKFVKGLGEVDCKEIGDCVPGAGATSTDLCPLALDYLRRCSQLLAKI
 YKMPKPIFLSGRLASLPRRLQEQSASSEDGIESVL SDFDDDTGLIEVWIILLEQLTAAVSNCPRQHQP
 TLDLLFELLRDVTKTPGPGFGIYAVVHLLL PVMSLWLLRSHKDHYSYWDVASANFKHAIIGLSCELVVEHIQ
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 AQSCQLIIEIPHDEKPNGHAKKSVSFREIVVSLLSHQVLLQNL YDILLEEFVKGPSGEEKTVQVPDTKL
 AGFLRYISMQLAVIFDLLLLSYRTAREFDTSPGLKCLLKKVSGIGGAANLYRQSAMSFNIYFHALVCAV
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 DWVWL VKRLHKLCELCNHYIQMHL DLESSLEEPLTFKSDPFFILPSFQSESSTPSTGGFSGKNTPSDD
 RREHLSEPQSLRVGSDMLMLPPSPKTEKKDPGRKKEWESAGNKICTMAADKTI SKLMTEYKRRRQPHN
 LPPFPKEVKVDKKGEP L GPRGPDSP LLQRPQHLIDQGM RHSFSAGPELLRQEKRRPSGSGTSSLSVSVR
 DAEAQIQAWTNMVLTVLNQIQILPDQTF TALQPAVFCISQLTCHVTDIRVVRQAVREWLGRVGRVYDIIIT

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

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_001033258.4](#), [NP_001028430.1](#)

RefSeq Size: 8216 bp

RefSeq ORF: 6513 bp

Locus ID: 215821

UniProt ID: [Q3UGY8](#)

Cytogenetics: 10 7.79 cM

Gene Summary: Participates in the regulation of systemic glucose homeostasis, where it negatively regulates insulin granule biogenesis in pancreatic islet beta cells (PubMed:24711543). Also regulates glucagon granule production in pancreatic alpha cells (PubMed:25737957). Inhibits nuclear translocation of the transcriptional coregulator PHB2 and may enhance estrogen receptor alpha (ESR1) transcriptional activity in breast cancer cells (By similarity).[UniProtKB/Swiss-Prot Function]