

Product datasheet for **MG224967**

Adcy3 (NM_138305) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy3 (NM_138305) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Adcy3
Synonyms:	AC3; mKIAA0511
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224967 representing NM_138305 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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TGCCCTCTGACCCCGACCGGGGTCGGCCGACCCATGAAATTTCTGTGCGGAACCTCGGGTCTCGCT
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CTCATCATTGCCTCCAAGCCAGAGGTGAAGAAAACAGCCAAAATGGCCTCAACGGCTCGGCCGTGCCAA
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GGGCGGGACAGGCCAGCTGCCTTCCCAATGGCTCCTCTGTTACTGCCCCACCAAGTGGTGGACAACC
CC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224967 representing NM_138305
 Red=Cloning site Green=Tags(s)

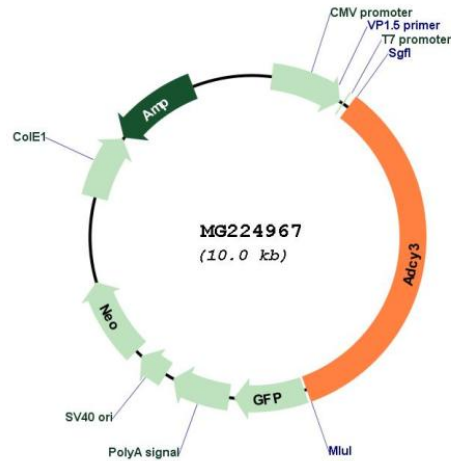
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 AGVIGARKPHYDIWGNTVNVASRMESTGVMGNIQVVEETQVILREYGRFVRRGPIFVKGKGELLTFFLK
 GRDRPAAFNGSSVTLPHQVVDNP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
 Cloning Scheme:



Plasmid Map:



ACCN: NM_138305

ORF Size: 3435 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

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_138305.3](#), [NP_612178.2](#)

RefSeq Size: 4348 bp

RefSeq ORF: 3438 bp

Locus ID: 104111

UniProt ID: [Q8VHH7](#)

Cytogenetics: 12 A1.1

Gene Summary: Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling (PubMed:9768837, PubMed:11055432, PubMed:25329148). Participates in signaling cascades triggered by odorant receptors via its function in cAMP biosynthesis (PubMed:9768837, PubMed:11055432). Required for the perception of odorants (PubMed:11055432). Required for normal sperm motility and normal male fertility (PubMed:15705663). Plays a role in regulating insulin levels and body fat accumulation in response to a high fat diet (PubMed:25329148).[UniProtKB/Swiss-Prot Function]