

Product datasheet for MR224967

Adcy3 (NM_138305) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy3 (NM_138305) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adcy3
Synonyms:	AC3; mKIAA0511
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224967 representing NM_138305. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCGAGGAACCGAGGGCTTCTCGGATCCCGAGTACTCGGCAGAGTACTCAGCTGAATACTCGGTGAGC
CTGCCCTCTGACCCCGACCGGGGTCGGCCGGACCCATGAAATTTCTGTGCGGAACTCGGGGTCCTGC
CTGTGCCTGCCTCGCTTATGCGGCTGACCTTCGTGCCTGAGTCCTGGAGAACCCTACCAGACCTAC
TTCAAAGGCAGCGCCATGAGACCCTGCTGGTGTGGTGGTCTTTGCGGCCCTCTTTGACTGCTACGTG
GTAGTGATGTGCGCGGTGCTTCTCCAGCGACAAGCTGGCGCCCTCATGGTGGCAGGCTTCGGTCTG
GTGTTGGACATCATCCTTTTCGTGCTCTGTAAGGGGGTCTCCCGGACCGAGTGAGCCGCAAGTG
GTACCCTACCTGCTGTGGCTGCTCATCTCGGCCAGATCTTCTCTACCTGGGCCTGAACCTTTACCGG
GCCACGCAGCCAGTGACACTGTGGGTTGGCAGGCTTTCTTTGTCTTCTCCTTCTCATAACGCTGCC
CTCAGCCTCAGCCCATCGTGATCATCTCTGTGGTCTCCTGTGTTGTGCACACGCTTGTGTTGGGGT
ACTGTGGCCAGCAGCAGGATGAGCTGGAAGGGATGCAGCTGCTGAGGGAGATCCTGGCCAACGTC
TTCCTCTACCTGTGTGCTATCATCGTGGCATCATGTCTACTACATGGCAGACCAGCAAGCAGCGAAG
GCCTTCTGGAGGCCCGCCAGTCACTGGAGGTGAAGATGAATCTGGAGGAGCAGACCAGCAGCAGGAA
AACCTTATGCTTCCATCCTGCCAAGCACGTGGCTGACGAGATGCTGAAGGACATGAAGAAGGACGAG
AGCCGAAGGACCAGCAGCAGTTCAATACCATGTACATGTACCGGCAGCAGAAATGTCAGCATCCTGTT
GCAGATATTGTGGGCTTTACCCAGCTGTCTCTGCTTGCAGTGCCAGGAGCTCGTGAAGTTACTCAAC
GAGCTCTTCGCCGCTTTGACAAGCTGGCAGCCAAATACCACCAGCTGAGGATCAAGATCCTAGGGGAC
TGTTACTACTGCATCTGCGGCTTGCCTGACTACCGGGAGGACCATGCCGTGTGCTCCATCCTTATGGGG
CTTGCCATGGTAGAGGCCATCTCGTACGTGCGGGAGAAGACCAAGACTGGAGTGGACATGCGTGTGGGA
GTGCACACAGGCACTGTCTAGGCGGTGTCTGGGCCAGAAGCGCTGGCAGTATGATGTATGGTCTACT
GATGTCACCGTGGCAAACAAGATGGAGGCTGGTGGCATCCAGGGCGCGTGCACATTTCCAGAGCACC
ATGGACTGCCTGAAGGGGAGTTTGTGAGGAGTCTGGTGTGGGGCAGTGCCTGCGACTACCTAGAT
GAGAAGGGCATCGAAACCTACCTCATCATTGCCTCCAAGCCAGAGGTGAAGAAAACAGCCAAAATGGC
```



[View online >](#)

CTCAACGGCTCGGCCGTGCCAAACGGAGCGCCGGCATCCTCAAACCCAGCTCCCCTGCCCTCATCGAG
 ACCAAGGAGCCCAATGGAAGTGCCCATGCCAGCGGCTCCACATCAGAGGAGGCTGAAGAACAGGAGGCC
 CAGGCTGACAACCCCTCGTTCCCAACCCCGCCGAGGCTGCGCTCCAGGACCTGGCGGACCGTGTG
 GTGGACGCTCTGAGGATGAGCAGAACTGAACCAGCTGCTTAATGAGGCCCTGCTGGAGCGGGAGTCC
 GCCCAGGTGGTAAAGAAGAGAAACACATTCCTCCTGACCATGAGGTTTATGGACCCAGAGATGAAAAA
 CGCTACTCGGTGGAGAAGGAGAAGCAGACGGGGCTGCCTCAGCTGCTCCTGTGTGCTCTTCTGTC
 ACGGCCATGGTGGAGATACTCATTGACCCCTGGCTGATGACAACTATGTGACCTTTGTGGTTGGGAG
 GTTCTGCTCCTGATCCTGACCATCTGCTCGATGGCTGCCATCTTCCAGGTCATTTCCCAAGAAGCTT
 GTGGCCTTCTCATCTTGATTGACCGGACCCGCTGGGCAAGGAACACCTGGGCCATGTTAGCCATCTTC
 ATTCTGGTTATGGCCAATGTTGTGGACATGCTCAGCTGTCTCCAGTACTACATGGGACCTTACAACATG
 ACAGCTGGGATGGAGCTGGACGGCGGCTGCATGGAGAACCCCAAGTACTACAACACTACGTAGCTGTGCTG
 TCGCTCATCGCCACCATCATGCTGGTGCAGGTGAGCCACATGGTGAAGCTGACGCTCATGCTGCTCGTC
 ACAGGCGCGTGACTGCCCTCAACCTGTACGCTGGTGTCTGCTTTGATGAATACGACCACAAGCGC
 TTTCAGGAAAAGGACTCTCTATGGTGGCCTTAGAGAAGATGCAGGACTTGCACCCCTGGGCTCAAT
 GGCCTGACAGGCTGCCCTGGTGCCTTCCAAGTACTCCATGACTGTGATGATGTTGCTCATGATGCTG
 AGCTTTTACTACTTCTCGCGCCAGTGGAAAACTGGCCGAACACTGTTCTTGTGGAAGATTGAGGTC
 CATGACCAGAAAACGCTGTCTACGAGATGCGCCGATGGAACGAGGCCTTGGTACCAACATGTTGCTT
 GAGCATGTTGACGCCATTTTCTGGGGTCCAAGAAGAGAGATGAGGAGCTGTACAGCCAGTCTTATGAC
 GAGATTGGAGTCACTGTTTGCCTCCTTGCCTCACTTTGCTGACTTCTACACTGAGGAGAGCATCAACAAC
 GGCGGCATCGAGTGTCTACGCTTCTCAATGAGATCATCTCTGATTTTACTCTCTCGGACAATCCC
 AAATTCGGGTGATCACCAGATCAAACTATTGGCAGCACCTATATGGCAGCTTCAAGGAGTACACCA
 GATGTCAACACCAATGGCTTTACAAGCTCCAGCAAGGAGGAGAAGTCAACAAGGAGCGCTGGCAGCAC
 CTGGCTGACCTGGCTGACTTTGCATTAGCCATGAAGGACACGCTCACAACATCAACAACAGTCTTC
 AACAACTCATGTTGCGCATAGGCATGAACAAAGGAGGGTTCTGGCTGGCGTCATTGGAGCCCGGAAA
 CCACACTATGACATCTGGGGCAATACGGTCAATGTGGCCAGCAGGATGGAATCCACAGGAGTCAAGGC
 AACATCCAGTGGTAGAAGAGACGAGGTATCCTTCGAGAGTACGGCTTCCGCTTTGTGAGGCGAGGT
 CCCATCTTTGTGAAAGGCAAAGGGGAGCTTCTGACCTTTTTCTTGAAGGGGCGGGACAGGCCAGTCC
 TCCCCAATGGCTCCTCTGTTACTACTGCCCCACCAAGTGGTGGACAACCCC
 ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Protein Sequence:

>Peptide sequence encoded by MR224967
 Blue=ORF Red=Cloning site Green=Tag(s)

MPRNQGFSDPEYSAEYSAEYSVSLPSPDPDRGVGRTHEISVRNSGSCLCLPRFMRLTFVPESLENLYQTY
 FRQRHETLLVLFVFAALFDCYVVMCAVVFSSDKLAPLMVAGFGLVLDIILFVLCKKGLLPDRVSRKV
 VPYLLWLLISAQIFSYLGLNFSRAHAASDTVWQAFFVFSFFITLPLSLSPIVIVISVVSCVVHTLVLGV
 TVAQQQDELEGMQLLREILANVFLYLCAIIVGIMSYYMADRKHKAFLEARQSLVKMNLLEEQSQQE
 NLMLSILPKHVADEMLKDMKKDESQKQDQFNTMYMRHENVSILFADIVGFTQLSSACSAQELVKLLN
 ELFARFDKLAAYHQLRIKILGDCYYICGLPDYREDHAVCSILMGLAMVEAISYVREKTKTGVDMRVG
 VHTGTVLGGVLGQKRWQYDVWSTDVTVANKMEAGGIPGRVHISQSTMDCLKGEFDVESDGGSRCDYLD
 EKGIEYLI IASKPEVKKTAQNLNGSAVPNGAPASSKPSPALIETKEPNGSAHASGSTSEEAEQEQA
 QADNPSFPNRRRLRLQDLADRVVDASEDEHNLNQLLNEALLERESAQVVKRNTFLLTMRFMPEMET
 RYSVEKEKQSGAAFSCSCVVLFACTAMVEILIDPWLMTNYVTFVVEVLLILITICSMIAIFPRSFPKKL
 VAFSSWIDRTRWARNTWAMLAIFILVMANVVDMLSCLQYYMGPYNMTAGMELDGGCMENPKYYNYAVL
 SLIATIMLVQVSHMVKLTMLLVTGAVTALNLYAWCPVFDEYDHKRFQEKDSPMVALEKMQVLATPGLN
 GTDRLPLVPSKYSMVMVMMLSFYYFSRHVEKLARTLFLWKIEVHDQKERVYEMRRWNEALVTNMLP
 EHVARHFLGSKRDEELYSQSYDEIGVMFASLPNFADFYTEESINNGGIECLRFLNEISDFDSLNDP
 KFRVITIKITIGSTYMAASGVTPDVNTNGFTSSSKEEKSDKERWQHLADLADFALAMKDTLTNINNQS
 NNFMLRIGMNGGVLGAVIGARKPHYDIWGNTVNVASRMESTGVMGNIQVVEETQVILREYGRFVRRG
 PIFVKKGELLTFFLKGRDRPAAFPNGSSVTLPHQVVDNP
 TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9011_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138305

ORF Size: 3432 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 Size: 4348 bp

RefSeq ORF: 3438 bp

Locus ID: 104111

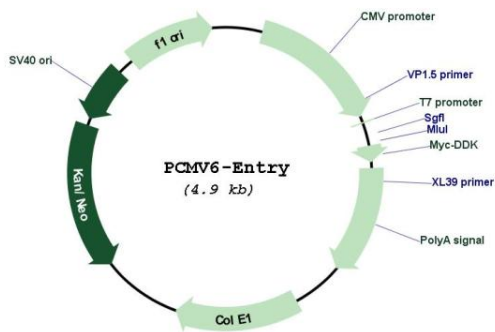
UniProt ID: [Q8VHH7](#)

Cytogenetics: 12 A1.1

MW: 129 kDa

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]

Product images:



Circular map for MR224967