

Product datasheet for MR225447

Adcy1 (NM_009622) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy1 (NM_009622) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adcy1
Synonyms:	AC1; brl; D11Bwg1392e; I-AC; mKIAA4070
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR225447 representing NM_009622 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGGGGCGCCGCGCGGCCAAGGGCGGCGGAGGCGGGCGAGCCCGGGGGCGCAGAGCGGGCGG
CCGGGCCGGGCGCGCGTGGTTCCGGGCGTGTGGCGAGGAGTTCGCGTGCCCGAGCTGGAGGCGCT
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GCTGCAGCAGGTCGGTCAGCTGGCGTGTCTTACGCTCACCTTCGCGTACTCTGCTGCCCTTCGCG
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TCACAACATTGAGACCTCTTTATTGTGCCATCCCATCGGAGGAAGATATCCCAGGCTTGATTCTCTCG



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GATATCAAACCAGCCAAGAGGATGAAGTTC AAGACTGTGTGCTATCTGCTGGTGCAGCTCATGCACTGCC
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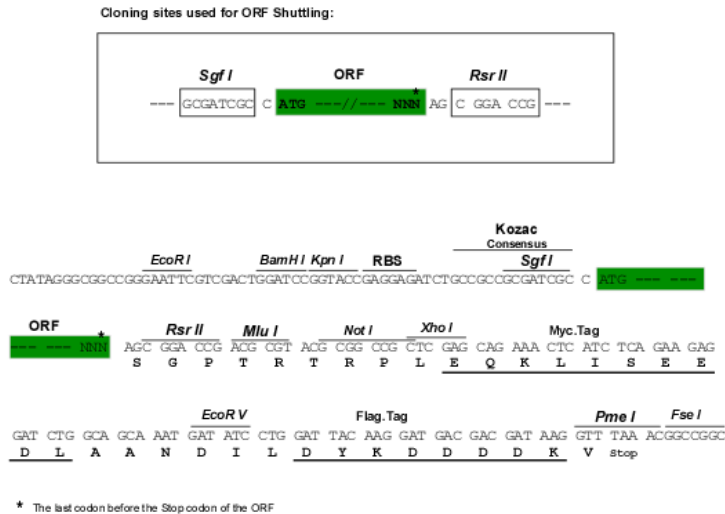
Protein Sequence:

>MR225447 representing NM_009622
 Red=Cloning site Green=Tags(s)

MAGAPRQGGGGGAGEPGEAERAAGPGRRGRFRACGEFACPELEALFRGYTLRLEQAATLALAVLSLL
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 LGGPARRSAGGAMGSTVAEQGVWQLLLVTFVSYALLPVRSLLAIGFGLVVAASHLLVTAALVPAKRPRWL
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 DFLKPPERIFHKIYIQRHDNVSILFADIVGFTGLASQCTAQELVKLLNELFGKFDELATENHCRRIKILG
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 DIKPAKRMKFKTVCYLLVQLMHCRCMKFAEIPFSNVMTCEDDDKRRALRTASEKLRNRSSFSTNVVYTP
 GTRVNRYISRLLEARQTELEADLNFFTLKYKHVEREQKYHQLQDEYFTSAVVLALILAALFGLIYLLVI
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 YTKVGGGALSGRSYEPIMAILLFSCTLALHARQDVRLRLDYLAQAEEERDDMERVKLDNKRILFNLL
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 FYKDLEKIKTIGSTYMAAVGLAPTAGTRAKKSISHLCTLADFAIDMFDVLEINYQSYNDFVLRVGINV
 GPVVAGVIGARRPQYDIWGNVTNVASRMDSTGVQGRIVQTEEVHRLLRKCSYQFVCRGKVSVKGKEMLT
 YFLEGRDGNSSHGRTRFLERRMCPYGRGGQARRPPLCPAAGPPVPRPGLPPAPTSQYLSSTAAGKEA

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9002_b06.zip
Restriction Sites: SgfI-RsrII
Cloning Scheme:



ACCN: NM_009622

ORF Size: 3354 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:

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_009622.2](#)

RefSeq Size: 12259 bp

RefSeq ORF: 3357 bp

Locus ID: 432530

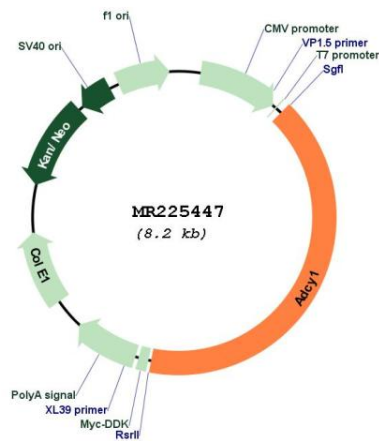
UniProt ID: [O88444](#)

Cytogenetics: 11 4.72 cM

MW: 123.8 kDa

Gene Summary: Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Mediates responses to increased cellular Ca(2+)/calmodulin levels (PubMed:9662407, PubMed:7816821). May be involved in regulatory processes in the central nervous system (PubMed:9662407). May play a role in memory and learning (PubMed:7816821). Plays a role in the regulation of the circadian rhythm of daytime contrast sensitivity probably by modulating the rhythmic synthesis of cyclic AMP in the retina (PubMed:24048828). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225447