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Product datasheet for RC222906

ADCY5 (NM_183357) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY5 (NM_183357) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADCY5
Synonyms:	AC5; FDFM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC222906 representing NM_183357
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCGGCTCCAAAAGCGTGAGCCCCCCGGGCTACGCGGCGCAGAAGACTGCGGCGCCGGCGCCCCGGG
GAGGCCCCGAACACCGCTCTGCGTGGGGCGAGGCCGATTCCCGCGCGAATGGCTACCCCCATGCCCCCGG
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GTCATGACCCTCAACGAGCTCTTCGCCCGCTTTGACAAGCTGGCCGCAGAGAATCACTGTTTACGTATTA
AGATCCTTGGGGATTGTTATTACTGCGTCTCGGGGCTGCCTGAAGCAAGGGCTGACCACGCCCACTGCTG
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AGT

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Protein Sequence:

>RC222906 representing NM_183357
Red=Cloning site Green=Tags(s)

MSGSKSVSPPGYAAQKTAAPAPRGGPEHRSAWGEADSRANGYPHAPGGSARGSTKKPGGAVTPQQQQRLA
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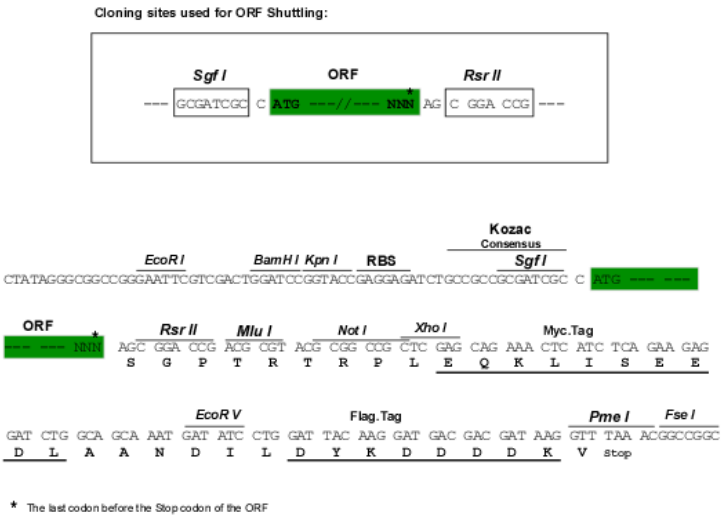
S

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8116_f05.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



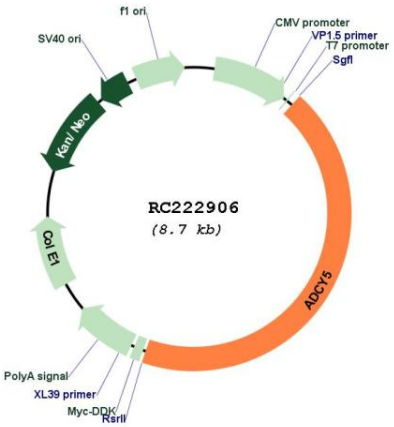
ACCN: NM_183357

ORF Size: 3783 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_183357.3
RefSeq Size:	6098 bp
RefSeq ORF:	3786 bp
Locus ID:	111
UniProt ID:	O95622
Cytogenetics:	3q21.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine metabolism, Vascular smooth muscle contraction
MW:	138.9 kDa

Gene Summary: This gene encodes a member of the membrane-bound adenylyl cyclase enzymes. Adenylyl cyclases mediate G protein-coupled receptor signaling through the synthesis of the second messenger cAMP. Activity of the encoded protein is stimulated by the Gs alpha subunit of G protein-coupled receptors and is inhibited by protein kinase A, calcium and Gi alpha subunits. Single nucleotide polymorphisms in this gene may be associated with low birth weight and type 2 diabetes. Alternatively spliced transcript variants that encode different isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RC222906