

Product datasheet for **SC126190**

ADCY6 (NM_015270) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY6 (NM_015270) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADCY6
Synonyms:	AC6; LCCS8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_015270 edited
 CCGGGGTAGAGGGCGGCTGCGCTGGACAGCTCGGGAGGGGGCGAGGGCCGGGCGGACGGC
 GGACGGCGGACGGCGGGCGGGAGCCCAGGGCAGGCGGAGCCGGGCGGCGAGCAACATG
 TCATGGTTTAGTGGCCTCCTGGTCCCTAAAGTGGATGAACGGAAAACAGCCTGGGGTGAA
 CGCAATGGGCAGAAGCGTTCGCGGCGCCGTGGCACTCGGGCAGGTGGCTTCTGCACGCC
 CGCTATATGAGCTGCCTCCGGGATGCAGAGCCACCCAGCCCCACCCTGCGGGCCCCCT
 CGGTGCCCTGGCAGGATGACGCCTTCATCCGGAGGGGCGGCCAGGCAAGGGCAAGGAG
 CTGGGGCTGCGGGCAGTGGCCCTGGGCTTCGAGGATACCGAGGTGACAACGACAGCGGGC
 GGGACGGCTGAGGTGGCGCCGACGCGGTGCCAGGAGTGGGCGATCCTGCTGGCGCCGT
 CTGGTGCAGGTGTTCCAGTGAAGCAGTCCGTTTCGGCCAAGCTGGAGCGCCTGTACCAG
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 CTCAGCGGCTGGGCCTTCCACCTTGCAATTTGATCTTGGCCTGGCAACTTAACCGTGGT
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 ATTGGCATCTGCACACTATCCAGCAGAGGTGTCTCAGCGCAGGCCTTTCAGGAGACC
 CGCGGTTACATCCAGGCCGGCTCCACCTGCAGCATGAGAATCGGCAGCAGGAGCGGCTG
 CTGCTGTCGGTATTGCCCCAGCAGTGGCCATGGAGATGAAAGAAGACATCAACACAAAA
 AAAGAAGACATGATGTTCCACAAGATCTACATACAGAAGCATGACAATGTGAGCATCCTG
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 ATGACCCTGAATGAGCTCTTTGCCCGTTTGACAAGCTGGCTGCGGAGAATCACTGCCTG
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 GACCATGCCACTGCTGTGTGAGATGGGGGTAGACATGATTGAGCCATCTCGTGGTA
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TGCGGCGTCCTTGCGTTGCGGAAATGGCAGTTCGATGTGTGGTCCAATGATGTGACCCTG
 GCCAACCCATGGAGGCAGGAGGCCGGGCTGGCCGCATCCACATCACTCGGGCAACTG
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 ATGGGCATTGATGATTCAGCAAAGACAACCGGGCACCAAGATGCCCTGAACCTGAG
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 TTTTTCTGGGAATATTTGTACAATATTTGTACAAAGACAGGCATGAGGAGTGCCTA
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 CCAGCCAGGTGTCCTCCTATGCACAGAGCAGAGGAGGGAGAAGCTTGGGGAGCCAGCT
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 GGAACGGGGTGTCTGGCCTCACTGGTACTGTGAAAATGCTCAGAGAGCAAGCCTGTGTG
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 CTGCCCCAGTGTCTTCTGCTGTCTGTGACAAGGGGGCATGGAGCATCTTCTCTTTC
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 TCCCCAGCCTTACGCTGAGTCTAGCATGTTTCTAGCTCCCCAGTCCCTTGTGAAGCCT
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 CTTTTACCCCTTCCCTGCAACCTCCTTGACTCTGGCCTGAATTTGTTGGTGCCTCAGTT
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 TGTCTTGGAAATGACTAGAGAGGCAGAGGAGAAGGGTTTCCAGAGTTGCTAGGTTTGGGA
 GTGGAAGGGGCAGGCAGTGCCTTGCCCTCCTCATGCCCTTCTGACACCAGCTCCCTG
 TGGAGGCTGGTTTCTGGGTAATGCCTCCCTTGGGCATCTTCATGCATCAACCAAATGGG
 CCATCAGTACTTCATTAGTCATGGCAGAAGGAGGGGAAAAGACTTGTTTTCCAGACAGA
 AAATCTACTCCCCTGTCCCCAGCCATATCCCTGGATAGGAAGGGATAGGAAGAGACTACT
 TGGTGCCATGGGGTAGGGGTGAGGGTATAAGTAGATCAGAGTGGGAAGACCTCAGCCTTG
 GGTGGCTTGTCTGTCTTCTTGGCAGGTGGGAGGGCCTGTCCACACCCTGGATCCCCGTA
 CCACAGTGCCAGCCATGCCCTTCCCCTGGGCTACCATTGTCCCTTCTCACCCAGTTGG
 TAGAGGAGTCAGGAGGTGGGAGGCCGTGGGCTTTGGTTTTATAATGTAACCACTGTGGGG
 GTGGGGGAGGATGGTGAACCATGATTTTCAAGTAAATATTTAATATTTAAATATCAAT
 AAAATCAAACCTTTTGTAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015270 unedited
 CCGGGTCGCCATTTGTAATACGACTTCACTATAGGGCGGCCGCGCATTACATCTGGTAC
 CCGTCCGGAATCCCAGGATATCGTCGACCCACGCGTCCGCCGGGTAGAGGGCGGCTGC
 GCTGGACAGCTCGGGAGGGGGCAGGGCCGGCGGACGGCGGACGGCGGACGGCGGGCGG
 GAGCCCAGGGCAGGCGCGGAGCCGGCCGGCAGCAACATGTCATGGTTTGTGGCCTCCT
 GGTCCCTAAAGTGGATGAACGGAAAACAGCCTGGGGTGAACGCAATGGGCAGAAGCGTTC
 GCGGCGCGTGGCACTCGGGCAGGTGGCTTCTGCACGCCCGCTATATGAGCTGCCTCCG
 GGATGCAGAGCCACCCAGCCCCACCCCTGCGGGCCCCCTCGGTGCCCTGGCAGGATGA
 CGCCTTATCCGGAGGGGCGGCCAGGCAAGGGCAAGGAGCTGGGGCTGCGGGCAGTGGC
 CCTGGGCTTCGAGGATACCGAGGTGACAACGACAGCGGGCGGACGGCTGAGGTGGCGCC
 CGACGCGGTGCCAGGAGTGGGCGATCCTGCTGGCGCGTCTGGTGCAGGTGTTCCAGTC
 GAAGCAGTTCCGTTCCGCAAGCTGGAGCGCTGTACCAGCGTACTTCTCCAGATGAA
 CCAGAGCAGCCTGACGCTGCTGATGGCGGTGCTGGTGTGCTCACAGCGGTGCTGCTGGC
 TTTCCACGCCGACCCGCCGCCCTCAGCCTGCCTATGTGGCACTGTTGGCTGTGCCGC
 CGCCTTNGGTCGTGGGCTCATGGTGGTGTGAACCCGCATAGCTTCCGCCAGGACTCCAT
 GTGGGTGGTGAAGTACCTGGTGTGGGCATCCTGGCNGCAGTGCAGGTCCGGGGCGCTCT
 CGCAGCAGACCCGCGCAGCCCCTA

Restriction Sites:

Please inquire

ACCN:

NM_015270

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](#)

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_015270.2](#), [NP_056085.1](#)

RefSeq Size: 6594 bp

RefSeq ORF: 3507 bp

Locus ID: 112

UniProt ID: [O43306](#)

Cytogenetics: 12q13.12

Domains: CYCc

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, Taste transduction, Vascular smooth muscle contraction

Gene Summary:

This gene encodes a member of the adenylyl cyclase family of proteins, which are required for the synthesis of cyclic AMP. All members of this family have an intracellular N-terminus, a tandem repeat of six transmembrane domains separated by a cytoplasmic loop, and a C-terminal cytoplasmic domain. The two cytoplasmic regions bind ATP and form the catalytic core of the protein. Adenylyl cyclases are important effectors of transmembrane signaling pathways and are regulated by the activity of G protein coupled receptor signaling. This protein belongs to a small subclass of adenylyl cyclase proteins that are functionally related and are inhibited by protein kinase A, calcium ions and nitric oxide. A mutation in this gene is associated with arthrogyriposis multiplex congenita. [provided by RefSeq, May 2015]