

Product datasheet for SC117621

ADCY3 (NM_004036) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY3 (NM_004036) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADCY3
Synonyms:	AC-III; AC3; BMIQ19
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117621 sequence for NM_004036 edited (data generated by NextGen Sequencing)

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ATGCCGAGGAACCAGGGCTTCTCCGAGCCGAATACTCGGCCGAGTACTCAGCCGAGTAC
TCCGTCAGCCTGCCCTCCGACCCCTGACCCGCGGGTGGGCCGACCATGAAATCTCGGTC
CGGAACCTCGGGCTCCTGCCTGTGCCTCGCTTCATGCGGCTGACTTTCGTGCCGGAG
TCCTTGGAGAACCTCTACCAGACCTACTTCAAAGGCAGCGCCACGAGACCCTGCTGGT
CTGGTGGTCTTTGCAGCCCTCTTTGACTGCTACGTGGTGGTCATGTGTGCTGTGGTCTTC
TCCAGCGACAAGCTGGCTTCCCTCGCCGTGGCTGGAATTGGACTGGTGTGGACATCATC
CTCTTCGTGCTCTGAAAAAGGGGCTGCTCCCGACCGGGTACCCCGCAGAGTGTGCC
TACGTGCTGTGGCTGCTATAACCGCCAGATCTTCTCCTACCTGGCCCTGAACTTCGG
CGTGCCACGCGGCTAGTGACACGGTGGGCTGGCAGGTCTTCTTTGTCTTCTCCTTCTTC
ATCACGCTGCCCTCAGCCTCAGCCCATCGTGATCATCTCCGTGGTCTCCTGTGTGGT
CACACGTTGGTCTTGGGGTACCGTGGCCAGCAGCAGCAGGAGGAGCTCAAGGGGATG
CAGCTGCTGCGGGAGATCCTGGCCAACGTCTTCTCTACCTGTGCGCCATCGCTGTGGG
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TCGCTGGAGGTGAAGATGAACCTGGAAGAGCAGAGCCAGCAGCAGGAGAACCTCATGCTT
TCCATCCTGCCAAGCAGTGGCTGACGAGATGCTGAAAGACATGAAGAAAGACGAGAGC
CAGAAGGACCAGCAGAGTTCAACACCATGTACATGTACCGTCACGAGAACGTCAGCATC
CTCTTTGCCGACATCGTGGGCTTTACCCAGCTGTCTTCTGCCTGCAGTGCCAGGAGCTT
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GAGGACCACGCCGCTGCTCCATCCTCATGGGGTGGCCATGGTGGAGGCCATCTCGTAT
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CTGGGGGGCGTCTGGGCCAGAAGCGCTGGCAGTACGACGTGTGGTGCAGTGTGCACT
GTAGCCAACAAGATGGAGGCCGGCGCATCCCTGGGCGCTGCACATCTCCAGAGCACC
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TACCTAGAAGAGAAGGTATTGAAACCTACCTCATCATTGCCCTCAAGCCAGAGGTGAAG

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AAAACAGCCACCCAGAATGGCCTCAATGGCTCGGCCCTGCCAATGGAGCACCAGCTTCC
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AGTGGGTCCAGCTCGGAGAAGCCCGAGGAGCAGGATGCCAGGCCGACAACCCCTCATT
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CAAGTAGTAAAGAAGAGAAAACACCTTCTCTTGTCCATGCGGTTTCATGGACCCCGAGTG
GAAACCCGCTACTCGGTGGAGAAGGAGAAGCAGAGTGGGGCTGCCTTCAGCTGCTCCTGC
GTCCTCCTGCTGACAGGCCCTGGTCGAGATACTCATCGACCCCTGGCTAATGACAAAAC
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TCTCTCCTGGACAATCCCAAGTTCCGGGTGATCACCAGATCAAAAACCATTTGGCAGCACG
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AAGGAAGACAAGTCCGAGAGAGAGCGCTGGCAGCACCTGGCTGACCTGGCCGACTTCGCG
CTGGCCATGAAGGATACGCTCACCAACATCAACAACCAGTCCCTTCAATAACTTCATGCTG
CGCATAGGCATGAACAAAGCGGGGTTCTGGCTGGGGTTCATCGGAGCCCGGAAACCACAC
TACGACATCTGGGGCAATACAGTCAATGTAGCCAGCAGGATGGAGTCCACGGGGTTCATG
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GGCGGGGATAAGCTAGCCACCTTCCCAATGGCCCTCTGTCACTGCCCCACCAGGTG
GTGGACAACCTCTGA
    
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Clone variation with respect to NM_004036.3
 1131 c=>t;2226 a=>g;2871 a=>g

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_004036 unedited
GGAAGCACTTGGATTTGTAACCGACTTCACTATAGGGCGGCACGCGCAATTCGGCAGGAG
GGTCCACTTCTTAGGGCCAGTAGCAGACACCAGCCAGTATGCCGAGGAACCAGGGCTTC
TCCGAGCCGATACTCGGCCGAGTACTCAGCCGAGTACTCCGTACGCCTGCCCTCCGACC
CTGACCGCGGGTGGGCCGACCCATGAAATCTCGGTCCGGTAACTCGGGCTCCTGCCTG
TGCTGCTCGCTTATGCGGCTGACTTTCGTGCCGGAGTCCCTGGAGAACCTCTACCAG
ACCTACTTCAAAAGGCAGCGCCACGAGACCCTGCTGGTGTGGTGGTCTTTGCAGCCCTC
TTTGACTGCTACGTGGTGGTTCATGTGTGCTGTGGTCTTCTCCAGCGACAAGCTGGCTTC
CTCGCCGTGGCTGGAATTGGACTGGTGTGGACATCATCCTCTTCTGCTCTGCAAAAAG
GGGCTGCTCCCGACCGGGTACCCCGCAGAGTGTGCCCTACGTGCTGTGGCTGCTCATA
ACCGCCAGATCTTCTCTACCTGGGCCTGAACTTCGCGCGTGCCACCGGGCTAGTGAC
ACGGTGGGCTGGCAGGTCTTCTTTGTCTTCTCCTTCTTTCATCACGCTGCCCTCAGCCTC
AGCCCCATCGTGATCATCTCCGTGGTCTCCTGTGTGGTGCACACGTTGGTCTGGGGGTC
ACCGTGGCCAGCAGCAGCAGGAGGAGCTCAAGGGGATGCAGCTGCTGCGGGAGATCCTG
GCCAACGCTTCTCTACCTGTGCGCCATCGCTGTGGGCATCATGCTCTACTACATGGCT
GACCGCAAGCACCGCAGGCCCTTCTGGNAGCCCGCCA
    
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3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004036 unedited
 ATGTACCGCGGCACGCAATCTAGTATCGAGTTTTTTTTTTTTTTTTTTTCAAGTTGAATAA
 AGCTTTTAATAAAACAGTCTTGTCTTTATCAATACCTGTAAATTCTCTTAAAGCAGTAG
 CAAAGGCGACTGTAGCAAGAGCTCAAAAGGCAAGGCAATATCGGAAAGTGTATTTAACAG
 AAGATTAATAAATAAAATGTAGAAGATCTGTTTATATATTTTTCTTTCAAAAATAAATCC
 CCCCTCCCCTGCCAGGTGAAAGGAAATATTGCACTTTCTGTTCTCATGACTAAGGGGACA
 GGAGTTCCAGAAGAACCTTTCAAGATGATCAGGAACACCAGGACGAGGGCCGTCTCACCT
 CACTCGGACCACATGGAGACCTCCCTTCAAAATGGGAGCCATGTCCTGCCCCACCAAGCC
 CTGTCTGAAGTGGAGCTTCCCGCCTGTGCTCCCTCCACAGTCCCGGAAAGCCCAGCGGC
 AAAGGCAGCTTTGTCCCAGCTCTGCCACCCTCTGCTCACAGTGGTCAGGGCCCCCAGG
 GGCAAGGACGGCAGGGATTGGAACGAGGGCTCTGGAAGGACTGTCAGCCCTATGCCTAA
 GACCCCTATGCTGGGGACACTACAGGCACACAGAGGAATAGCAGGGCCACCCTCAGAGCT
 CACACATCCACGAACAAATGAAGGCTGAGGAGTTTCTAAACCTATAGTCCATGAGTGTG
 CACTTCATCCAGGAAGGGTCGGACTTCCCTCAGTTTCAAAAATAAATNCTCCCTCAGTT
 AGNACTGTTGCAGGCTCGAGGCCTTNNCAGAGTGTCCACACCTGTGGGGCAGGTGACAG
 AGGGCCATGGNGGAATGTGGCTAGCTTATCCCGCCCTCAGAATAAGTCAGCAGCTCCCC
 TTCCCTCACAAAATGGGCCTNGCCTACAAACGGAGCCGCTCTCGAAGATGACTGGGGTTC
 CTTACACCTGATGTGCCATGTACCCCGGGCTCATCTGTGCTAT

Restriction Sites:

NotI-NotI

ACCN:

NM_004036

Insert Size:

4470 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<ol style="list-style-type: none">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_004036.2 , NP_004027.1
RefSeq Size:	4342 bp
RefSeq ORF:	3435 bp
Locus ID:	109
UniProt ID:	O60266
Cytogenetics:	2p23.3
Domains:	CYCc
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine metabolism, Vascular smooth muscle contraction, Vibrio cholerae infection
Gene Summary:	<p>This gene encodes adenylyl cyclase 3 which is a membrane-associated enzyme and catalyzes the formation of the secondary messenger cyclic adenosine monophosphate (cAMP). This protein appears to be widely expressed in various human tissues and may be involved in a number of physiological and pathophysiological metabolic processes. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is 1 aa shorter compared to isoform 1.</p>