

## Product datasheet for **RG220272**

### ADCY3 (NM\_004036) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY3 (NM_004036) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADCY3
Synonyms:	AC-III; AC3; BMIQ19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220272 representing NM_004036 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGAGGAACCCAGGGCTTCTCCGAGCCGAATACTCGGCCGAGTACTCAGCCGAGTACTCCGTACGCC  
TGCCCTCCGACCCTGACCGCGGGTGGCCGACCCATGAAATCTCGGTCCGGAACCTCGGGCTCCTGCCT  
GTGCTGCCTCGCTTTCATGCGGCTGACTTTCGTGCCGAGTCTTGAGAACCTCTACCAGACCTACTTC  
AAAAGGCAGCGCCACGAGACCCTGCTGGTGTGGTCTTTCAGCCCTCTTGACTGCTACGTGGTGG  
TCATGTGTGCTGTGGTCTTCCAGCGACAAGCTGGCTTCCCTCGCCGTGGCTGGAATTGGACTGGTGT  
GGACATCATCCTTTCGTGCTCTGCAAAAAGGGGCTGCTCCCGGACCGGGTACCCGCAGAGTGTGCC  
TACGTGCTGTGGCTGCTCATAACCGCCAGATCTTCTCCTACCTGGGCTGAACCTCGCGCGTGCCACG  
CGGCTAGTGACACGGTGGGCTGGCAGGTCTTCTTGTCTTCTCCTTTCATCACGCTGCCCTCAGCCT  
CAGCCCCATCGTGATCATCTCCGTGGTCTCCTGTGTGGTGACACGTTGGTCTGGGGGTACCGTGGCC  
CAGCAGCAGCAGGAGGAGCTCAAGGGATGCAGCTGCTGCGGGAGATCCTGGCCAACGTCTTCTCTACC  
TGTGCGCCATCGCTGTGGGATCATGTCTACTACATGGCTGACCGCAAGCACCAGGCAAGGCTTCTGGA  
GGCCCGCCAGTCGCTGGAGGTGAAGATGAACCTGGAAGAGCAGAGCCAGCAGCAGGAGAACCTCATGCTT  
TCCATCCTGCCAAGCAGTGGCTGACGAGATGCTGAAAGACATGAAGAAAGCAGAGCCAGGAGGACC  
AGCAGCAGTTCAACACCATGTACATGTACCGTACGAGAACGTCAGCATCCTTTCGCCGACATCGTGGG  
CTTTACCCAGCTGTCTTCTGCCTGCAGTGCCAGGAGCTTGTGAAGCTGCTCAACGAGCTCTTTCGCCGC  
TTTGACAAGCTGGCAGCTAAATACCACCAGCTGCGGATTAAGATCCTGGGCGACTGCTACTACTGCATCT  
GCGGCTTGCCCGACTACCGGGAGGACCACGCCGTCTGCTCCATCCTCATGGGGTGGCCATGGTGGAGGC  
CATCTCGTATGTGCGGGAGAAGACCAAGACTGGGGTGGACATGCGTGTGGGGTGCACACGGGCACCGTG  
CTGGGGGCGTCTGGCCAGAAGCGTGGCAGTACGACGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT  
AGATGGAGGCCGCGGCATCCCTGGGCGGTGCACATCTCCAGAGCACCATGGACTGCCTGAAAGGGGA  
GTTTGATGTGGAGCCAGGCGATGGGGCAGCCGCTGTGATTACCTAGAAGAGAAGGTATTGAAACCTAC



[View online »](#)

CTCATCATTGCCTCCAAGCCAGAGGTGAAGAAAACAGCCACCCAGAATGGCCTCAATGGCTCGGCCCTGC  
CCAATGGAGCACCAGCTTCTCAAAGTCCAGCTCCCCTGCCCTCATTGAGACCAAGGAGCCCAACGGGAG  
TGCCCACAGCAGTGGGTCCACGTCCGAGAAGCCCGAGGAGCAGGATGCCAGGCCGACAACCCCTCATT  
CCCAACCCACGCCGGAGGCTGCGCTGCAGGACCTGGCTGACCGAGTGGTGGATGCCTCTGAAGATGAGC  
ACGAGCTCAACCAGCTGCTCAACGAGGCCCTGCTTGAGCGAGAGTCCGCCAAGTAGTAAAGAAGAGAAA  
CACCTTCTCTTGTCCATGCGGTTTCATGGACCCGAGATGGAAACCCGCTACTCGGTGGAGAAGGAGAAG  
CAGAGTGGGGCTGCCTTCAGCTGCTCCTGCGTCGTCCTGCTCTGCACGGCCCTGGTCGAGATACTCATCG  
ACCCCTGGCTAATGACAAACTATGTGACCTTCATGGTGGGGGAGATTCTGCTCCTCATCCTGACCATCTG  
CTCCCTGGCTGCCATCTTTCCCGGGCCTTTCTAAGAAGCTTGTGGCCTTCTCAACTTGGATTGACCGG  
ACCCGCTGGGCCAGGAACACCTGGGCCATGCTCGCCATCTTCATCCTGGTGGTGGCAATGTCGTGGACA  
TGCTCAGTGTCTCCAGTACTACACGGGACCCAGCAATGCAACGGCAGGGATGGAAACGGAGGGCAGCTG  
CCTGGAGAACCCCAAGTATTACAACATGTGGCCGTGCTGTCCCTCATCGCCACCATCATGCTGGTGCAG  
GTCAGCCACATGGTGAAGCTCACGCTCATGCTGCTCGTCGAGGCCGCGTGGCCACCATCAACCTCTATG  
CCTGGCGTCCCGTCTTTGATGAATACGACCACAAGCGTTTTCCGGAGCACGACTTACCTATGGTGGCCTT  
AGAGCAGATGCAAGGATTCAACCTGGGCTCAATGGCACTGACAGGCTGCCCTGGTGCCTTCCAAGTAC  
TCTATGACGGTGTGGTGTTCCTCATGATGCTCAGCTTCTACTACTTCTCCCGCCACGTAGAAAACTGG  
CACGGACACTTTTCTTGTGGAAGATTGAGGTCCACGACCAGAAGGAACGTGTCTATGAGATGCGACGCTG  
GAACGAGGCCCTTGGTCACCAACATGTTGCCGTGAGCACGTGGCAGCCATTTCTGGGGTCCAAGAAGAGA  
GATGAGGAGCTGTATAGCCAGACGTATGATGAGATTGGAGTCAATGTTTGCCTCCCTGCCCACTTTGCTG  
ACTTCTACACAGAGGAGAGCATCAACAATGGTGGTATTGAGTGTCTGCGTTTTCTCAATGAAATCATCTC  
AGATTTTGACTCTCTCTGGACAATCCCAAGTCCGGGTGATCACCAAGATCAAACCATTGGCAGCAGC  
TATATGGCGGCTTCAGGAGTCAACCCGATGTCAACACCAATGGCTTGGCCAGCTCCAACAAGGAAGACA  
AGTCCGAGAGAGCGCTGGCAGCACCTGGCTGACCTGGCCGACTTCGCGCTGGCCATGAAGGATACGCT  
CACCAACATCAACAACCAAGTCTTCAATAACTTCATGCTGCGCATAGGCATGAACAAAGGCGGGTCTG  
GCTGGGGTTCATCGAGCCCGAAACCACACTACGACATCTGGGGCAATACAGTCAATGTAGCCAGCAGGA  
TGGAGTCCACGGGGTCAATGGGCAACATTCAGGTGGTAGAAGAAACCAAGTATCCTCCGAGAGTACGG  
CTTCCGCTTTGTGAGGCGAGGCCCATCTTTGTGAAGGGGAAGGGGAGCTGCTGACCTTCTTCTTGAAG  
GGGCGGGATAAGCTAGCCACCTTCCCAATGGCCCTCTGTCACACTGCCCCACCAGGTGGTGGACAAC  
CC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG220272 representing NM\_004036  
 Red=Cloning site Green=Tags(s)

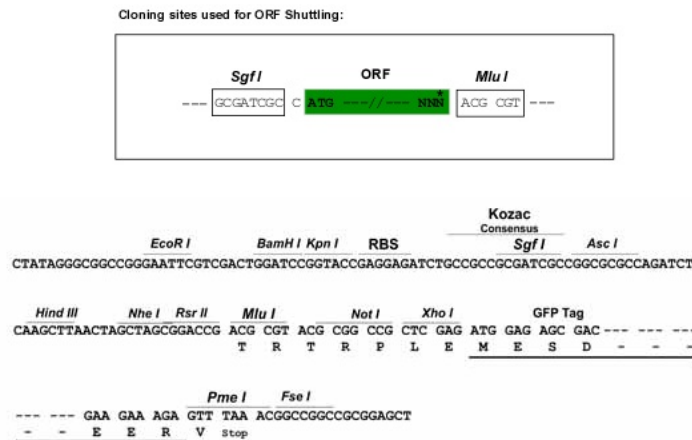
```

MPRNQGFSEPEYSAEYSAEYSVSLPSPDRGVGRTHEISVRNSGSCLCLPRFMRLTFVPESLENLYQTYF
KRQRHETLLVLVFAALFDCYVVVMCAVVFSSDKLASLAVAGIGLVLDIILFVLCCKGLLPDRVTRRVLV
YVLWLLITAQIFSYLGLNFARAHAASDTVGWQVFFVFSFFITLPLSLSPIVIVSVVSCVVHTLVLGVTVA
QQQQEELKGMQLLREILANVFLYLCAIIVGIMSYMADRKHAFLEARQSLEVKMNL EEQSQQENML
SILPKHVADEMLKDMKKDESQKDDQQFNTMYRHEVNSILFADIVGFTQLSSACSAQELVKLLNELFAR
FDKLAAYHQLRIKILGDCYYCICGLPDYREDHAVCSILMGLAMVEAISYVREKTKTGVDMRVGVHTGTV
LGGVVGQKRWQYDVWSTDVTVANKMEAGGIPGRVHISQSTMDCLKGEFDVEPGDGGSRCDYLEEKGIETY
LI IASKPEVKKTATQNLNGSALPNGAPASSKSSSPAL IETKEPNGSAHSSGSTSEKPEEQDAQDNPSF
PNPRRRLRLQDLADRVVDASEDEHELNQLLNEALLERESAQVVKRNTFLLSMRFMPPEMTRYVEKEK
QSGAAFSCSCVLLCTALVEILIDPWLMTNYVTFMVGEILLILITICSLAAIFPRAFPKKLVAFSTWDR
TRWARNTWAMLAIIFILVMANVVDMLSCLQYYTGPSNATAGMETEGSCLENPKYYNYVAVLSLIATIMLVQ
VSHMVKLTMLLVAGAVATINLYAWRPVFDEYDHKRFREHDLPMVALEQM QGFNPLNGTDRLPLVPSKY
SMTVMVFLMMLSFYYFSRHVEKLARTLFLWKIEVHDQKERYEMRRWNEALVTNMLPEHVARHFLGSKKR
DEELYSQTYDEIGVMFASLPNFADFYTEESINNGGIECLRFLNEIISDFDSLDDNPKFRVITKIKTIGST
YMAASGVPDVTNNGFASSNKEDKSERERWQHLADLADFALAMKDTLTNINNQSFNFMRLRIGMKNKGGVL
AGVIGARKPHYDIWGNVNVASRMESTGVMGNIQVVEETQVILREYGRFVRRGPIFVKGKGELLTFFLK
GRDKLATFPNGPSVTLPHQVVDNS
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

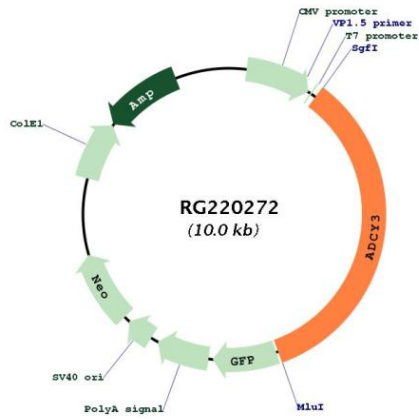


**ACCN:** NM\_004036

**ORF Size:** 3432 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004036.5</a>
<b>RefSeq Size:</b>	4342 bp
<b>RefSeq ORF:</b>	3435 bp
<b>Locus ID:</b>	109
<b>UniProt ID:</b>	<a href="#">O60266</a>
<b>Cytogenetics:</b>	2p23.3
<b>Domains:</b>	CYCc
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	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
<b>Gene Summary:</b>	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]

Product images:



Circular map for RG220272