

## Product datasheet for **RR208260**

### Adcy2 (NM\_031007) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Adcy2 (NM\_031007) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Adcy2  
**Synonyms:** AC2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR208260 representing NM\_031007  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCGGGCGGCCGCTACCTGCGGGACCGCGCGAGGCGGGCGGGCAGCGGGCGGGAGGCGGAGAGG  
 GGCTGCAGCGGTCCCGGACTGGCTCTACGAGTCTACTACTGCATGAGCCAGCAGCACCCGCTCATCGT  
 CTTCTGTGCTCATCGTCATGGGCGCCTGCCTCGCCCTGCTAGCCGTCTTCTTCGCGCTCGGGCTGGAG  
 GTGGAAGACCATGTGGCATTAAAAATAACGGTTCCCACTGCCCTGGCCATTTTCTTTGCCATATTATTC  
 TTGCTGCATAGAGTCTGTGTTCAAGAAGCTACTCCGTGTGTTTTCGCTGGTGATTTGGATATGTCTGGT  
 TGCCATGGGATACCTGTTTCATGTGCTTCGGAGGGACTGTGCTGCCTGGGACCAGGTGTCATTCTTCCTC  
 TTCATCATCTTTGTGGTATATACCATGCTTCCCTTCAACATGCGAGATGCCATCATTGCCAGCATCCTCA  
 CATCTTCATCTCATACGATAGTGTGAGCGTCTACCTGTCTGCAACACCAGGGGCCAAGGAGCACCTGTT  
 CTGGCAGATACTGGCCAATGTGATCATTTTCATTTGTGGAACTTGGCGGGAGCCTACCACAAGCACCTC  
 ATGGAGCTTGCCCTGCAGCAAACCTATCGGGACACGTGAATTCATCAAGTCCCGGATCAAGCTGGAAT  
 TTGAAAAACGGCAGCAGGAACGGCTCCTGCTCTCCTTGTGCTGCAAGCTCACATCGCCATGGAGATGAAAGC  
 TGAAATCATTAGAGGCTGCAGGGCCCCAAGCAGGACAGATGGAAAAACAAACAACCTCCACAATCTG  
 TATGTCAAACGACACACCAACGTGAGCATATTATACGCTGACATTGTTGGCTTACCCCGCTTGCAAGCG  
 ATTGCTCCCTGGCGAAGTGGTCCACATGCTGAATGAACTCTTTGGGAAGTTTGATCAAATAGCAAAGGA  
 GAATGAATGCATGAGAATAAAAATTTAGGAGACTGCTATTACTGTGTTCCGGGCTCCCTATATCACTC  
 CCTAACCATGCCAAGAAGTGTGAAAAATGGGATTGGATATGTGCGAAGCCATAAAGAAAGTGAGGGATG  
 CTACCGGAGTTGATATCAACATGCGTGTAGGAGTGCATTCTGGGAACGTTCTCTGTGGTGTGATTGGTCT  
 CCAGAAGTGCCAGTATGATGTGGTCTCATGATGTTACTCTGGCAAACCATGGAAGCTGGAGGAGTC  
 CCTGGGCGTGTTCACATTTCTTCACTCTGGAGCACTTGAATGGGGCTTATAAAGTGGAGGAAGGAG  
 ATGGTGAGATAAGAGACCATATTTAAAGCAGCACTTGGTGAAAACCTACTTTGTAATCAATCCCAAGGG  
 AGAGCGACGGAGTCTCAGCATCTTTCAGACCTCGACACACTCTGGACGGAGCCAAAGATGAGAGCATCT  
 GTCGCATGACCCGTAATTGGAGTCTGGGGAGCAGCCAAGCCATTCGCACATCTGCACCACAGAGATA



[View online »](#)

GCATGACCACAGAGAATGGGAAGATTAGTACCACGGATGTGCCAATGGGTCAACATAATTTTCAAATCG  
CACCTTAAGAAGTAAAGTACAGAGAAGAGATTGAAGAAGAACTGAATGAAAGGATGATCCAAGCAATT  
GATGGGATCAATGCACAGAAGCAATGGCTCAAGTCAGAAGACATTCAAAGAATCTCCCTGCTTTTCTATA  
ACAAGAATATAGAGAAAGAAATACCGAGCTACTGCACTGCCAGCATTCAAGTACTACGTGACCTGTGCCTG  
CCTCATCTTTCTCTGCATCTTCATTGTACAGATACTTGTATTGCCAAAACGTCCATCCTTGCTTCTCC  
TTTGGAGCTGCATTTCTCTCCCTCATCTTCATCCTCTTTGTCTGCTTGGACAGCTTTTGAATGCA  
GCAAAAAGGCCTCCACCTCTCTCATGTGGCTTTTGAATCATCAGGCATCATCGCAACCCGCCCCATGGCC  
ACGGATCTCCCTACAATCGTCACCACGGCTATCATACTAACCATGGCTGTGTTCAACATGTTTTCTCTG  
AGCAACTCTGAGGAGACAACCCCTCCACTGCCAATACATCAAATGCAAACGTTTCTGTCCCGGATAACC  
AGGCGTCGATTCTTCATGCTCGAAACTGTTTTTCTCCCGTACTTCATATACAGCTGCATCCTGGGCTT  
GATCTCCTGCTCCGTTTTCTGAGGGTGAAGTATGAGTAAAAATGTTAATCATGATGGTGGCACTCGTG  
GGCTACAACACCATTCTACTCCACACCCATGCCATGTTCTGGATGCGTACAGCCAGGCTCTGTTTCAGA  
GACCAGGCATTTGGAAAGACCTGAAGACCATGGGCTCCGTGCTACTCTCCATATTCTTCATCAGCTGCT  
GGTTCTGGGCAGACAGAGTGAATATTACTGTAGGTTAGACTTCTGTGGAAGAACAAGTTCAAAAAAGAG  
CGGGAGGAGATAGAAACCATGGAGAACCTAAATCGAGTGTGCTGGAGAACGTGCTTCTGCACACGTGG  
CTGAACACTTCTGGCCAGGAGCCTGAAAAATGAGGAGCTGTACCACCAGTCTACGACTGTGCTGTGT  
CATGTTTGCCTCCATTCCGGACTTCAAGGAGTTCTACACAGAGTCAAGTGTGAACAAGGAAGGCTTGGAA  
TGCTGCGGCTCCTGAATGAGATCATTGCTGACTTTGATGATCTGCTTTCTAAGCCAAAGTTCAAGTGGT  
TTGAAAAGATCAAGACCATTGGGAGCACATACATGGCAGCCACGGGACTGAGTGCATACCCAGCCAGGA  
GCACGCCAGGAACCTGAGCGTCAAGTACATGCACATAGGCACCATGGTGGAGTTTGCATATGCCCTGGT  
GGAAAAGTGGATGCCATCAATAAGCACTCCTTCAACGACTTCAAAGTGGGATGATCAACCATGGGC  
CTGTAATAGCTGGCGTATAGGGGCTCAAAGCCACAGTATGACATCTGGGGCAACACTGTCAACGTGGC  
CAGCAGAATGGACAGCACCGGGCTCTGGACAAAATACAGGTGACTGAGGAGACAAGCCTCATCTGCAG  
ACGCTTGCTACAGTGTACATGTCGAGGTATCATCAATGTGAAGGGGAAGGGGACCTGAAGACATATT  
TTGTAACACAGAGATGTCAAGTCCCTTTCTCAGAGCAACTTGGCATCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR208260 representing NM\_031007  
Red=Cloning site Green=Tags(s)

MRRRRYLRDRAEAAAAAAGGGEGLQRSRDWLYESYYCMSQQHPLIVFLLLIVMGAACLALLAVFFALGLE  
VEDHVAFILITVPTALAIFFAIFILVCIESVFKLLRVFSLVIWICLVAMGYLFMFCGGTSAWDQVSFFL  
FIIFVYVYMLPFNMRDAIIASILTSSHTIVLSVYL SATPGAKEHLFWQILANVIIFICGNLAGAYHKHL  
MELALQTYRDTNCIKSRIKLEFEKRQERLLL SLLPAHIAMEMKAEIIQRLQGPKAGQMENTNMFHNL  
YVKRHTNVSILYADIVGFTRLASDCSPGELVHMLNELFGKFDQIAKENEKMRILKILGDCYCVSGLPISL  
PNHAKNCVKMGLDMCEAIKKVRDATGVDINMRVGVHSGNVLCGVIGLQKWQYDVVSHDVTLANHMEAGGV  
PGRVHISSVTLEHLNGAYKVEEGDGEIRDYPYKQHLVKTYFVINPKGERRSPQHLFRPRHTLDGAKMRAS  
VRMTRYLESWGAAKPFAHLHHRDSMTTENGIISTDVPMGQHNFNQRTLRTKSQKRFEEELNERMIQAI  
DGINAQKQWLKSEDIQRISLLFYKNKIEKEYRATALPAFKYVYVTCACLIFLCIFIVQILVLPKTSILGFS  
FGAAFLSILFIFVCFAGQLLQCSKASTSLMWLLKSSGIIANRPWPRI SLTIVTTAIIITMAVFNMFLL  
SNSEETLPTANTSNANVSVPDNQASILHARNLFFLPYFIYSCILGLISCSVFLRVNYELKMLIMMVALV  
GYNTILLHTHAHLVDAYSQVLFQRPGIWKDLKTMGSVLSIFFITLLVLGRQSEYYCRLDFLWKNKFKKE  
REEIETMENLNRVLLLENVLP AHVAEHFLARSLKNEELYHQSYDCVCMFASIPDFKEFYTESDVNKEGLE  
CLRLLNEIIADFDLLSKPKFSGVEKIKTIGSTYMAATGLSAIPSQEHAQEPERQYMHIGTMVEFAYALV  
GKLDAINKHSFNDFKLRVGINHGPIAGVIGAQPQYDIWGNVTNVASRMDSTGVLDKIQVTEETSLILQ  
TLGYTCTCRGIIINVKGKGLKTYFVNTEMSRSLSQSNLAS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

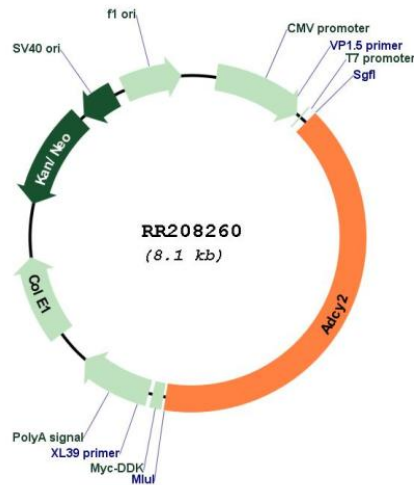
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_031007

ORF Size: 3270 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.

<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>	<u>NM_031007.1, NP_112269.1</u>
<b>RefSeq Size:</b>	4008 bp
<b>RefSeq ORF:</b>	3273 bp
<b>Locus ID:</b>	81636
<b>UniProt ID:</b>	<u>P26769</u>
<b>Cytogenetics:</b>	1p11
<b>MW:</b>	123.3 kDa
<b>Gene Summary:</b>	enzyme that catalyzes the formation of the secondary messenger cyclic adenosine monophosphate [RGD, Feb 2006]