

## Product datasheet for **SC127397**

### Adenylate cyclase 1 (ADCY1) (BC036858) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Adenylate cyclase 1 (ADCY1) (BC036858) Human Untagged Clone
Tag:	Tag Free
Symbol:	Adenylate cyclase 1
Synonyms:	AC1; DFNB44
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for BC036858, the custom clone sequence may differ by one or more nucleotides

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CCACGCGTCCGGAGGAAGCCGTCGCGGGGACCATGCTGCCTTCTCTGGGCTCAGACTGTTCTGAAAGG
ACCCCATGGCAGACTTGGCAAGGTCTCCACTTCAGGGGCAAACATCTCCATCATCAGCAACTCCAAACC
CAGCCACTTCTGGGAGTTCAGGAACTGTGTTTAGCCATAATGTCCTTGGGTTTGGTGAAAAACAAC
TGCTTTTTATTTGTGGGAAAAGTATTATATTGCCTATTTATTTTAAATCATGTACAATATTCATGTA
CAAATGTTAGAGCCATTCGGGTAGGATTCTCTCTAAATATTTATTGAAGAGGCTTTGTAATAGTGCAC
CAGTGACAGGTGCTGCCTGTTTACTCGTACCAAAAATGAAGACAAGCCCCACACCACCTCAGCCCTTGC
TTGGCCATGCTGTGGCCCTTTGAAAATGACCCTGTGTGCTCCCCTCGCGACCCTTGCATGCCTTTCATGC
CTGATGCCGTAGAGTAGAACACAGCCCCGAATGCTTCCAGTTGCTTGCAAGGGACCATGCCGGCCAGG
TGGTCCATGCCTGCGGGGTGTCTGTATCCTGCAGGAGGACGCCCTACAGACCAGCAACCCAAGTTGCC
AGCCCGTGTTCAGACTTTAAAGCCACCAGGGCTTCTGGAACACCTGCATAGAAGCAATAACTCTAA
CTCTATACTGTAGAGATGAGTCTGGTCCGAAGCAGATTAGTAATTTAGAGATAAGCCATGCATACAAGT
TGCCCCATTCTCTGGCTTGGGGTGGTGGGAGGCGGGGAGCTGCCACTCCCAAAGCCTCCACCCTTCTCTG
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CTTACCTGTGATAGGCCATTTAAGGAAATGGTGGCACTCTGAAGGCTGTCCCCATTACCTTCCACAAT
GCTGGTACCATCCTGGTAGAAGAGCCCTCTGAACAGGACACCTGTTCCAGGCTGGGGGCCCATGCTAGG
TTGGCTGGGTGTGAGAAGGTGCAACTGGGTGGCTTAGGCCTTCAAATTGAGCTTGGGGGTTCCAAGAG
AGGGGTCTTATTCGAGGAAGTACATACCCCAAATAACCATCAGTGCACAAATCATTCCATGCTCTTTGG
CACCAGGCAGGAGATGCTGCAGGCAGGTGTCCTGAGTTGGCAAAAATGGGCAAGTGGGGAATGGAGTTG
CTTCAACCTTTCTCAGTCCCGGCCCTCACTGCACCACCAAGTCAAGCAGAGCTGGGTGGGCTGAGACCA
GCATCCCAGCTGGACTGAGCCTGGGGGGAGGGGCTGGAGCCAAGGAGCCCCCTGGGTGGGGGCATCAGG
AGCAGGGGCAGGGCCTGAGGACTGCTCCCCTGCATGGAGGGCAGGCCAGGATGGAGCCAGGGTAGACT
TTGAGGAAGGCTCAGTGGGCTCAGCAGAAGGAAGGCTCTTCTCATAGTTGTGGTTTTTACAGATGGATT
TGGGTGATCTGAGTGTGGTCAGGCCCTGCCGTTGGGGAATGAATGCCACACGGGTTTGTCTGTAAGCTG
CAGTGTCTGTGATTCTGTGTGAAGTACAGCAGGGAGCTGAAGGACAGGCCCCCGCCTTGGGAGAGGACA
CGGGCATGGGCTGCTGGATGCAGGGCTCCAGGGCTGTGAAGGCAGAGGGGTCTCTGGAGGCAGACAGGG
TGGGCTGGGGGCCAGCAGCAGGGGGCAGAGCCCAGCCAGGGCAGCTGCTTCTGCATAGACATTCTCT
CCTGCGCAGGGCCAAGTGCCCATGAGCAGACCCCAGACAGACACGGTGGGGAGCTTGGAGCCCTCCGCT
CACCTAGAGGAGCCCTGGGACACGCACTGGAAAGTATTCTAGGGGCTTCTGCCTTATCCTTCTGTTTGT
TCATACACTTAGTGAAAGCAGATCCTGTACTAGGATGTGAGGATATCTGTACCTGCGTGGTCCATTCCA
TAAACACCAGATTCCATTTCAAGTTGCCACATTTTGGGGCTAGACTTCCCTAACAACATGCCATTGTG
AAATAATGCATATATTTGATTTTTAAATTTCCCTGAAAATTTAATCTATTCTGTCCATATGAAGTCTG
TTTCACTACCTTAAAAAATAGATACTCCACTAGAGGCTGTGCTTAATTCAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC036858 unedited GTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGATGGAGGGCAGGCCAGG ATGGAGCCAGGGTAGACTTTGAGGAAGGCTCAGTGGGCTCAGCAGAAGGAAGGCTCTTC TCATAGTTGTGGTTTTTACAGATGGATTTGGGTGATCTGAGTGTGGTCAGGCCCTGCCG TTGGGGAATGAATGCCACACGGGGTTTGTCTGTAAGCTGCAGTGTCTGTGATTCTGTGTG AACTGACAGCAGGGAGCTGAAGGACAGGCCCGCCCTTGGGAGAGGACACGGGCATGGGC TGCTGGATGCAGGGCTCCAGGGCTGTGAAGGCAGAGGGTCTCTGGAGGCAGACAGGGT GGGCTGGGGCCAGCAGCAGGGGGCAGAGCCCCAGCCAGGGCAGCTGCTTCTGCACATA GACATTCCTCCTGCGCAGGGCCAAGTGCCCATGAGCACAGCCCCAGACAGACACGGTGGG GAGCTTGGAGCCCTCCGCTCACCTAGAGGAGCCCTGNGACACGCACTGAAAAGTATTCTA GGGGCTTCTGCCTTATCCTTCTGTTTGTTCATACACTTAGTAAAGCAGATCCTGTACT ANGATGTGAGGATATCTGTCACCTGCGTGGTCCATTCCATANACACCAGATTCCATTTTC AGTTGCCACACATTTTNGGGCTAGACTTCCTAAANCACATGCCATTTGTGAATAATGCA TATATTTGTATTTTAAATTTCCCTGAAATTTAATCTATTCTGTCCATATGAAGTCTG TTTCACTACCTTAAAAAATAGATACTCCACTAGAGGCTGTGCTTAATTCAATCCATGTGT GTGCCTGCATTAATGTGTGAACACTGTTTNTCTGTGGGNGGCCATGACATCTGGGG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	BC036858
<b>OTI Disclaimer:</b>	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).
<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="#">BC036858.1</a>
<b>RefSeq Size:</b>	2515 bp
<b>RefSeq ORF:</b>	2515 bp
<b>Locus ID:</b>	107
<b>Cytogenetics:</b>	7p12.3
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Long-term potentiation, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine metabolism, Vascular smooth muscle contraction

**Gene Summary:**

This gene encodes a member of the of adenylate cyclase gene family that is primarily expressed in the brain. This protein is regulated by calcium/calmodulin concentration and may be involved in brain development. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]