

## Product datasheet for RC214876

### ADCY10 (NM\_018417) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY10 (NM_018417) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADCY10
Synonyms:	HCA2; HEL-S-7a; hsAC; SAC; SACI; Sacy
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214876 representing NM_018417 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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AAAGAGATCAACTACTTCATGTATACTATGAAGAAATTTTGGATATCTAACAGCAGCCAAGTCTTAATGT  
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ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214876 representing NM\_018417  
 Red=Cloning site Green=Tags(s)

MNTPKEEFQDWPIVIRIAAHL PDLIVYGHFSPERPFMDYFDGVL MFVDISGFTAMTEKFSSAMYMDRGAEQ  
 LVEILNYHISAI VEKVLIFGGDILK FAGDALLALWRVERKQLKNIITVVIKCSLEIHGLFETQEWEGLD  
 IRVKIGLAAGHISMLVFGDETHSHFLVIGQAVDDVRLAQNMAQMNDVILSPNCWQLCDRSMIEIESVDPDQ  
 RAVKVNFLKPPPNFNDFEFTKCTTFMHYYPSGEHKNLRLACTLKPDPLEMSLQKYVMESILKQIDNK  
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 DKSWSQTFESATFYSLKGEVCFNMGQIVLAKMLRKALKLLNRI FPNLISLFLHIHVEKNRHFHYVNRQ  
 AQESPPPGKKRLAQLYRQTVCL SLLWRIYSYSYLFHCKYYAHLAVMMQMNTALETQNC FQIIKAYLDYSL  
 YHHLAGYKGVWFKYEVMAHEHIFNLPLKGEIEIVAYVAETLVFNKIMGHLDLAIELGSRALQMWALLQ  
 NPNRHYQSLCRLSRCLLNSRYPLIQVLGRLWELSVTQEHI FSKAFFYFVCLDILLYSGFVYRTFECEL  
 EF IHQYENNRILKFHSGLLGLYSSVAIWAYARLQEWDFNFKFSNRANKLLPRRTMTLTYYDGI SRYMEGQ  
 VLHLQKQIKEQSENAQASGEELLKNLENLVAQNTTGPVFCPRLYHLMAYVCILMGDGQKCGLFLNTALRL  
 SETQGNILEK CWLNMN KESWYSTSELKEDQWLQ TILSLPSWEKIVAGRVNIQDLQKNKFLMRANTVDNHF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_018417

**ORF Size:** 4830 bp

**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](mailto: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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_018417.6](#)

**RefSeq Size:** 5061 bp

**RefSeq ORF:** 4833 bp

**Locus ID:** 55811

**UniProt ID:** [Q96PN6](#)

**Cytogenetics:** 1q24.2

**Protein Families:** Druggable Genome, Transmembrane

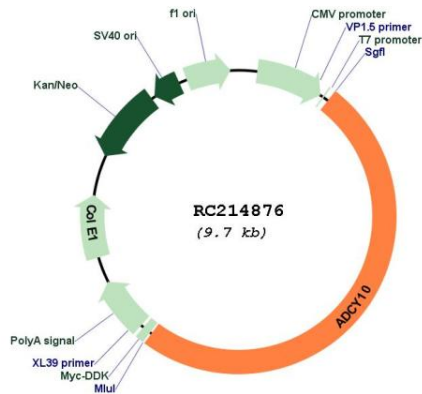
**Protein Pathways:** Purine metabolism

**MW:** 187 kDa

**Gene Summary:**

The protein encoded by this gene belongs to a distinct class of adenylyl cyclases that is soluble and insensitive to G protein or forskolin regulation. Activity of this protein is regulated by bicarbonate. Variation at this gene has been observed in patients with absorptive hypercalciuria. Alternatively spliced transcript variants encoding different isoforms have been observed. There is a pseudogene of this gene on chromosome 6. [provided by RefSeq, Jul 2014]

**Product images:**



Circular map for RC214876