

Product datasheet for **RG235157**

ADCY4 (NM_001198592) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY4 (NM_001198592) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADCY4
Synonyms:	AC4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235157 representing NM_001198592 Red=Cloning site Blue=ORF Green=Tags(s)

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AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG235157 representing NM_001198592

Red=Cloning site Green=Tags(s)

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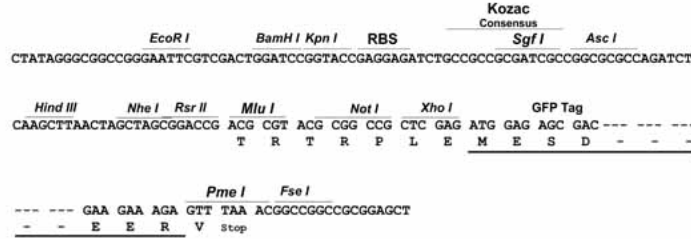
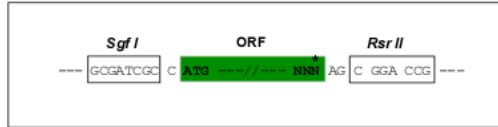
SGPTRRRLE - GFP Tag - V

Restriction Sites:

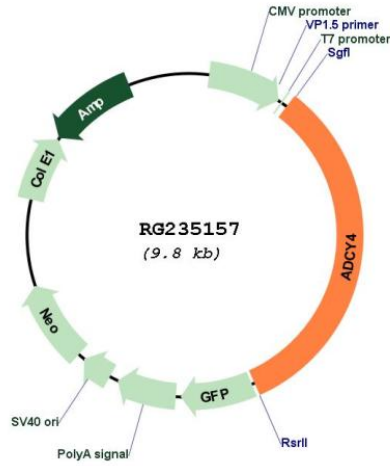
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001198592

ORF Size: 3231 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 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:	<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_001198592.2
RefSeq Size:	3419 bp
RefSeq ORF:	3234 bp
Locus ID:	196883
UniProt ID:	Q8NFM4
Cytogenetics:	14q12
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine metabolism, Taste transduction, Vascular smooth muscle contraction

Gene Summary:

This gene encodes a member of the family of adenylate cyclases, which are membrane-associated enzymes that catalyze the formation of the secondary messenger cyclic adenosine monophosphate (cAMP). Mouse studies show that adenylate cyclase 4, along with adenylate cyclases 2 and 3, is expressed in olfactory cilia, suggesting that several different adenylate cyclases may couple to olfactory receptors and that there may be multiple receptor-mediated mechanisms for the generation of cAMP signals. Alternative splicing results in transcript variants. [provided by RefSeq, Nov 2010]