

## Product datasheet for **RG211815**

### ADCY8 (NM\_001115) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADCY8 (NM_001115) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADCY8
Synonyms:	AC8; ADCY3; HBAC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211815 representing NM_001115 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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AAAACCATCAGGTATGTGCGGTCAAGGACAAAACACGATGTTGACATGAGGATTGGAATCCACTCCGGCT  
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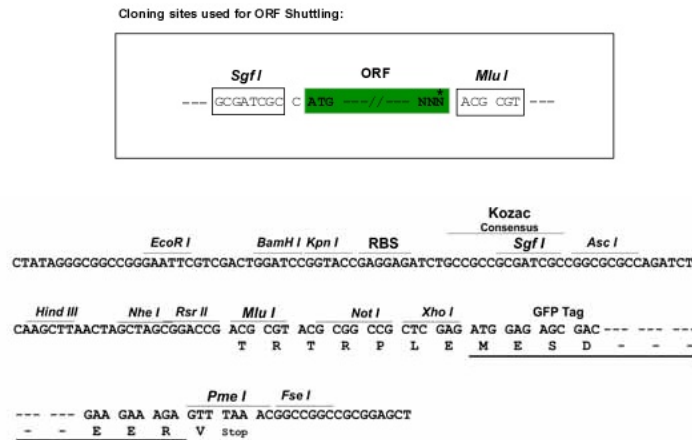
**Protein Sequence:** >RG211815 representing NM\_001115  
 Red=Cloning site Green=Tags(s)

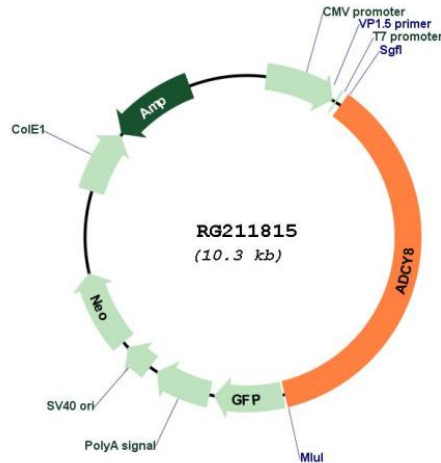
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 SLAAVVLGLVQSLNRQRQKQLLNENNNTGIKGHYNNRRTLLSPSGTEPGAQAEGTDKSDLP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**ACCN:** NM\_001115

**ORF Size:** 3753 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.

**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.

**RefSeq:** [NM\\_001115.1](#), [NP\\_001106.1](#)

**RefSeq Size:** 6005 bp

**RefSeq ORF:** 3756 bp

**Locus ID:** 114

**UniProt ID:** [P40145](#)

<b>Cytogenetics:</b>	8q24.22
<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, Long-term potentiation, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine metabolism, Taste transduction, Vascular smooth muscle contraction
<b>Gene Summary:</b>	Adenylate cyclase is a membrane bound enzyme that catalyses the formation of cyclic AMP from ATP. The enzymatic activity is under the control of several hormones, and different polypeptides participate in the transduction of the signal from the receptor to the catalytic moiety. Stimulatory or inhibitory receptors (Rs and Ri) interact with G proteins (Gs and Gi) that exhibit GTPase activity and they modulate the activity of the catalytic subunit of the adenylyl cyclase [provided by RefSeq, Jul 2008]