

Product datasheet for **MG217736**

Adcy10 (NM_173029) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy10 (NM_173029) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Adcy10
Synonyms:	4930431D04Rik; 4931412F17; sAC; Sacy
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217736 representing NM_173029 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MG217736 representing NM_173029
 Red=Cloning site Green=Tags(s)

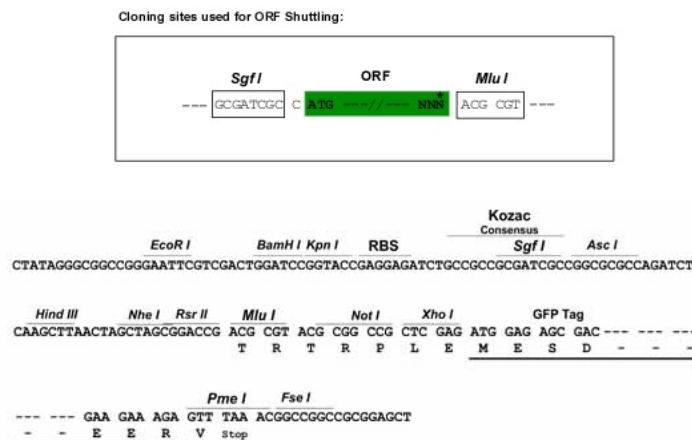
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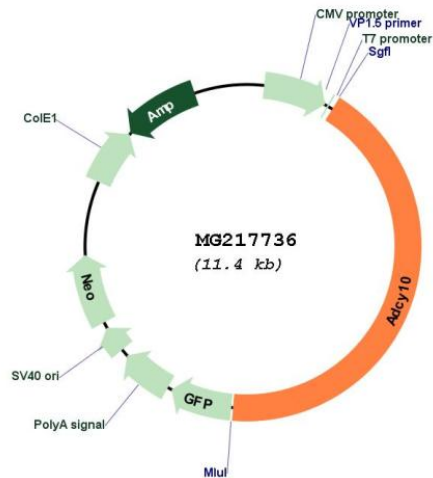
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_173029

ORF Size: 4842 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_173029.3](#), [NP_766617.2](#)

RefSeq Size: 5209 bp

RefSeq ORF: 4845 bp

Locus ID: 271639

UniProt ID: [Q8C0T9](#)

Cytogenetics: 1 H2.3

Gene Summary: Catalyzes the formation of the signaling molecule cAMP. May function as sensor that mediates responses to changes in cellular bicarbonate and CO₂ levels (By similarity). Has a critical role in mammalian spermatogenesis by producing the cAMP which regulates cAMP-responsive nuclear factors indispensable for sperm maturation in the epididymis. Induces capacitation, the maturational process that sperm undergo prior to fertilization (PubMed:14976244, PubMed:16054031). Involved in ciliary beat regulation (By similarity). [UniProtKB/Swiss-Prot Function]