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Product datasheet for MG226872

Adcy6 (NM_007405) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy6 (NM_007405) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Adcy6
Synonyms:	AC6; mKIAA0422
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG226872 representing NM_007405
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCATGGTTTAGTGGCCTCCTGGTTCCCAAAGTGGATGAACGGAAAACAGCTTGGGGGGAACGCAATG
GGCAGAAGCGCCCACGCCACGCGAATCGAGCCAGTGGCTTCTGCGCACCTCGCTACATGAGCTGCCTCAA
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CAGTTTGATGTCTGGTCAAACGATGTGACCCTGGCTAACCACATGGAGGCCGGGGGCCGGGCCGGCCGCA
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CAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226872 representing NM_007405
Red=Cloning site Green=Tags(s)

MSWFSGLLVPKVDERKTAWGERNGQKRPRHANRASGFCAPRYMSCLKNAEPPSPTPAAHTRCPWQDEAFI
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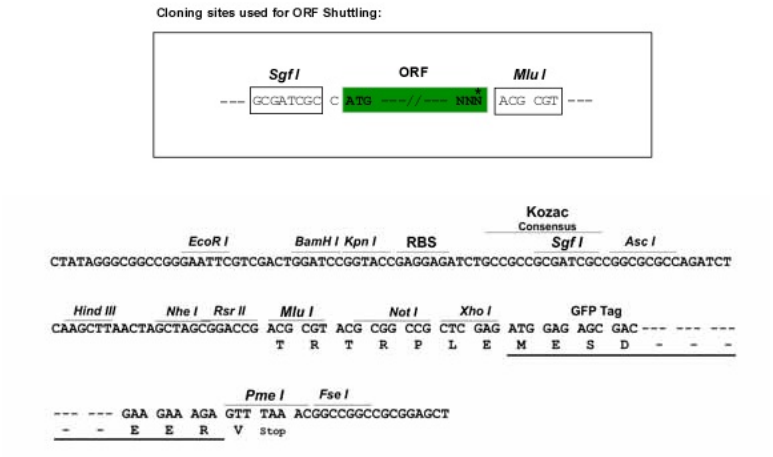
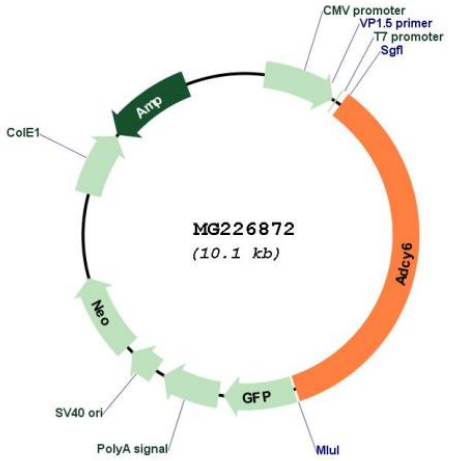
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_007405
ORF Size:	3504 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_007405.3
RefSeq Size:	6038 bp
RefSeq ORF:	3507 bp
Locus ID:	11512
UniProt ID:	Q01341
Cytogenetics:	15 F1

Gene Summary: Catalyzes the formation of the signaling molecule cAMP downstream of G protein-coupled receptors (PubMed:18071070, PubMed:24363043). Functions in signaling cascades downstream of beta-adrenergic receptors in the heart and in vascular smooth muscle cells (PubMed:18071070). Functions in signaling cascades downstream of the vasopressin receptor in the kidney and has a role in renal water reabsorption (PubMed:20466003, PubMed:20864687). Functions in signaling cascades downstream of PTH1R and plays a role in regulating renal phosphate excretion (PubMed:24854272). Functions in signaling cascades downstream of the VIP and SCT receptors in pancreas and contributes to the regulation of pancreatic amylase and fluid secretion (PubMed:23753526). Signaling mediates cAMP-dependent activation of protein kinase PKA and promotes increased phosphorylation of various proteins, including AKT (PubMed:18071070, PubMed:23753526). Plays a role in regulating cardiac sarcoplasmic reticulum Ca(2+) uptake and storage, and is required for normal heart ventricular contractibility (PubMed:18071070). May contribute to normal heart function (PubMed:18071070, PubMed:20359598). Mediates vasodilatation after activation of beta-adrenergic receptors by isoproterenol (By similarity). Contributes to bone cell responses to mechanical stimuli (PubMed:20371630, PubMed:24277577).[UniProtKB/Swiss-Prot Function]