

Product datasheet for MR217736

Adcy10 (NM_173029) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adcy10 (NM_173029) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adcy10
Synonyms:	4930431D04Rik; 4931412F17; sAC; Sacy
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217736 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGCGCGAAGGCAGGAATTACAAGACAGGGCAATCGTCAAGATAGCTGCTCACTTACCAGACCTCA
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TATTTTCAGGTTTACTGCAATGACTGAGAAGTTCAGCACGGCCATGTACATGGACCGAGGAGCCGAACAG
CTCGTGGAGATCCTCACTACTACATAAGTGCCATAGTGGAGAAAGTGTGATTTTTGGAGGAGACATCC
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GGTGGTATTAAGTGCAGCCTGGAGATCCATGGCTTGTGAAAGCAAGGAGGCTGAAGAAGGCCTGGAC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>MR217736 protein sequence
 Red=Cloning site Green=Tags(s)

MSARRQELQDRAIVKIAAHL PDLIVYGDFSPERPSVKCFDGLVDFDISGFTAMTEKFSTAMYMDRGAEQ
 LVEILNYYISAI VEKVLIFGGDILK FAGDALLALWKVERKQLKNIITVVIKCSLEIHGLFEAKEAEEGLD
 IRVKIGLAAGHITMLVFGDETRNYFLVIGQAVDDVRLAQNMAQMNDVILSPNCWQLCDRSMIEIERIPDQ
 RAVKVSFLKPPPTFNDFEFTKCMGFM DYYP SGDHKNFLRLACMLESDPELELSLQKYVMEIILKQIDDK
 QLRGYLSELRPVTIVFVNL MFKEQDKVEVIGSAIQ AACVHITSVLK VFRGQINKVFMFDKGC SFLCVFGF
 PGEKAPDEITHALES AVDIFDFCSQVHKIRT VSIGVASGIVFCGIVGHTVRHEYTVIGQKVNIAARMMY
 YPGIVSCDSV TYDGSNLPAYFFKELPKKVMKGVADPGPVYQCLGLNEKVMFGMAYLICNRYEGYPLLGRV
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 MQPQEI RDKVCVDL SVSSIPRELD SYLVEGSCGIPYYCEELLKNLDHHRVLLFQQAE TEQKTNVTWNNMF
 KHSVRPTDDMLF TSI SEGQKEVCYL VSGVRLN NL SPPASLKEISLVQLDSMSLSHQLV RCAAII GLTF
 TTELLFEILPCWNM KMMIKALATLVESNVFNCFRSSKDLQLALKQNVPTFEVHYRSLALKLEGLTYGEE
 EELREMEGEVVECRILRFCRPI MQKTAYELWLKDQKVLHLKCARFLEESAHR CNHCRNVDFIPYHFFIV
 DIRLNTLDMDTV KRMVTSQGFKIDEEEAIFSKSELPRKYKFPENLSITEIREKILHFFDNVILKMKSSPN
 DIIPLESCQCKELLQIVILPLAQHFVALEENKALYYFLELASAYLILGDNYNAYMYLGEGERLLKSLTN
 EDSWSQTFEYATFYS LKAEVCFNMGMVLAKKMLR KALKLLNRMFPCNLLTLTFQM HVEKNRLSHF MNQH
 TQEGSVPGKLAQLYLQASCF SLLWRIYSLNFF FHYKYGH LAAMMEMNTSLETQND FQIIKAYLDFSLY
 HHLAGYQGVWFKEYEILVMEQLLNLPLKGEAIEIMAYTADTLGH I KFLMGHLDLAIELGSR AHRMWSLLRN
 PNKYQMVLCRLSKPLFLK SRYKHLVQVLGWLWDL SVTEEDIFSKAFFYFVCLDIMLYSGFIYRTFEECLE
 FIH HEDNRILKFQSGLLGLYSCIAVWYARLQEWDNFNKFSDRAKHLVTRRTPTVLYYEGISRYMEGQV
 LHLKQKQIEEQAENAQDSGVEILKALETVAQNTTGPVFPRLYHLMAYVCILMGDGHSCDFFLNTALELS
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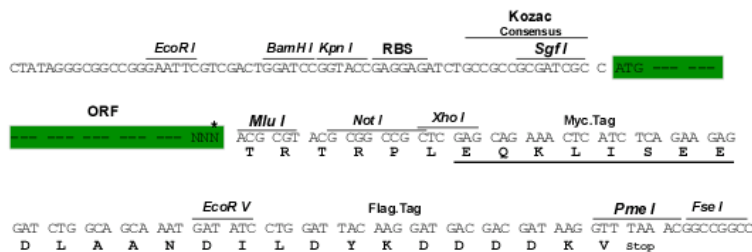
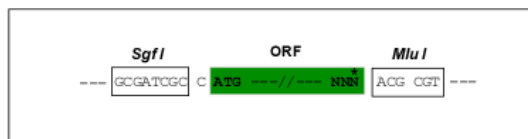
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Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



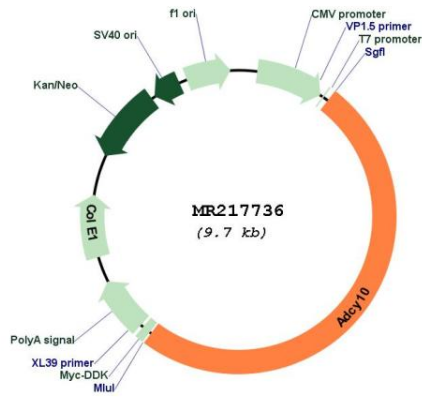
* The last codon before the Stop codon of the ORF

ACCN:

NM_173029

ORF Size:	4845 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:	<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_173029.1 , NM_173029.2 , NM_173029.3 , NP_766617.2
RefSeq Size:	5209 bp
RefSeq ORF:	4845 bp
Locus ID:	271639
UniProt ID:	Q8C0T9
Cytogenetics:	1 H2.3
MW:	186.4 kDa
Gene Summary:	Catalyzes the formation of the signaling molecule cAMP. May function as sensor that mediates responses to changes in cellular bicarbonate and CO ₂ 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]

Product images:



Circular map for MR217736