

Product datasheet for **MC229368**

Adcy7 (NM_001037723) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Adcy7 (NM_001037723) Mouse Untagged Clone
Tag: Tag Free
Symbol: Adcy7
Synonyms: AA407758
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229368 representing NM_001037723
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGC**C

ATGCCAGCCAAGGGCGCTACTTCTAAATGAGGGTGATGAAGGCCCGACCAGGCAGCGCTCTATGAGA
 AGTACCGGCTCACCAGCTTGACGGGCCACTGCTGCTTGTCTCTCTGGTGGCCGCGCCACCTGCAT
 TGGCTCATCAGCATCGCCTTCACTCATGAGGATCTCCGACAGACCAGGTTGCTCTGGGACTCGGTT
 CTATGCTGACGCTGTTTGTGGCTCTCTATGTGCTGGTGTATGTCGAGTGCCTGGTGCAGCGGTGGCTG
 GGGCTTGGCGCTACTCACCTGGGCTTGCCCTATGGTACTAGGCTCCGTGCTGATGTGGGACTCTTTGGA
 GAATGAAGCCCATGCGTGGGAGCAGGTGCCCTTCTTCTGTTTGTGCTTGTGGTGTATGCACTACTG
 CCTCTCAGCAGGAGGGCAGCCATCGTGGCAGGCGTGACCTCCACGGTCTCCCATCTCTGGTGTGGAG
 CTGTGACAAGAGCCTTCCAGACGTCCATGTCTAGCACTCAACTGGGCTGCAGCTCCTGGCCAATGCCGT
 TATCCTCCTGGGTGGGAACCTCACGGGTGCCTCCACAAGCACCAGCTGCAGGACCGCTCCAGGGATCTC
 TTTATCTACACCGTCAAATGCATCCAGATCCGTCGGAAGCTTCGTGTGGAGAAGCGCCAGCAGGAGAACC
 TGCTTCTGTAGTGTCTCCAGCACACATCTCCATGGGTATGAAGCTGGCCATCATTGAGCGCCTCAAAGA
 GGGTGGTGACCGACACTACATGCCCCACAACAACCTTTCACAGCCTCTATGTCAAGCGGCACCAGAATGTC
 AGCATCTTGTATGCAGACATCGTGGGCTTACAGAGGCTGGCCAGCGACTGCTCTCCCAAGGAGCTGGTGG
 TGGTGCTCAACGAGCTGTTTGGGAAGTTTGACCAGATTGCTAAGGCCAATGAGTGCATGCGGATCAAGAT
 CCTGGGTGACTGTTACTACTGCGTGTGAGGCTGCCCGTGTGCTGCCCCACACATGCCCGCAACTGTGTG
 AAGATGGGTCTGGACATCTGCGAGGCCATTAAGCAGGTGCGTGAGGCCACGGGCTGGACATCAGCATGC
 GTGTGGCATTCACTCCGGGAATGTGCTATGTGGGTCATCGGGCTCCGTAAGTGGCAGTATGATGTGTG
 GTCCCATGATGTGTCCTGGCCAACAGGATGGAGGCAGCTGGAGTCCCTGGCCGGGTGCACATCACAGAG
 GCAACATTGAATCACCTGGACAAGGCATATGAGGTGGAGATGGGCATGGGGAGCAGCGAGACCCCTATC
 TGAAAGAGATGAACATCCGAACCTACCTGGTATCGATCCCCGGAGCCAGCAGCCACCCACCCAGCCA
 CCACCTCTCAAGCCCAAGGGGACGCAACTCTGAAGATGCGGGCTTCACTGCGTGTAAACCCGCTATCTG
 GAGTCTTGGGGGCGAGCAAGGCCCTTGCACACCTCAACCACCGGGAGAGTGTGAGCAGCAGTGAGACCC



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CCATCTCCAATGGACGGAGGCAGAAGGCCATTCTCTGCGTCGACACCCGTGCCCTGATAGGAGTGCATC
TCCAAGGGGCGCTTGAAGATGACTGTGATGACGAGATGCTGTGACGCCATTGAGGGTCTCAGCTCCACC
AGGCCCTGCTGCTCCAAGTCTGATGACTTCCACACCTTTGGTCCCATTCTTGGAGAAGGGCTTTGAGC
GTGAGTACCGCCTGGTGGCCATCCCCGGGCTCGCTACGACTTCGCCTGTGCCAGCCTTGTCTTCGTCTG
CATCTGCTTGTCCACCTTCTAGTGATGCCAGGATGGCAACTCTGGGTGTGCTTTGGGTTGGTGGCC
TGCCTGCTGGGCTGGTTCTGAGTTTCTGCTTGTACTGAGTTCTCGAGGTGCTTTCCATCCCAGAGTA
CACTCCAGGCCATCTCGAGAGCGTGGAGACGCAGCCCTGGTCAGGCTTGTCTGGTTGTGCTGACTGT
TGGCAGCCTACTGACTGTCGCCATCATTAAACATGCCACTGACGCTTAACCCAGGCCAGAGCAGCCTGGA
GACAACAAGACAAGCCCACTGGCTGCACAGAACAGAGTTGGGACCCCATGTGAGCTCCTCCCGTACTACA
CCTGCAGCTGCATCCTGGGCTTCATTGCATGCTCTGTTTTCTGCGGATGAGCCTAGAGCTGAAGGCCAT
GCTGCTGACAGTGGCCTTGGTGGCTACCTGCTGCTCTTCAACCTCTCCCATGCTGGCAGTCTCAGGC
AACAGCACTGAGACCAACGGGACACAAAGGACACGGCTGCTCCTGTCTGATGCACAAAGCATGCCAGCC
ACACCTTGTCCGGGGCTCGGGAGACTGCCCTTCTCCAGTTATTTAGAGAGAGACCTGAAGATCAT
GGTTAACTTCTACCTGATCCTGTTCTATGCCACCCTCATTTGCTGTCTAGACAGATTGACTACTACTGC
CGTTGGACTGTCTGTGAAGAAGAAGTTCAAAAAGGAGCAGGAGTTTGAACAATGGAGAATGTGA
ACCGCCTCCTCCTGGAGAATGTGCTGCCGGCGCACGTGGCTGCCCACTTCAATGGGGACAAGGCAGCAGA
GGATTGGTACCATCAATCTTATGACTGTGTCTGTGTCATGTTGTCATCCGTTCCGGACTTCAAAGTGTT
TACACTGAGTGTGATGTCAACAAAGAAGGACTGGAGTGCCTTCGACTGCTGAATGAGATAATTGCTGATT
TTGACGAGCTCCTGCTGAAGCCCAAGTTTAGTGGTGTGGAGAAGATCAAGACCATTGGCAGCACCTACAT
GGCGGCAGCAGGGCTCAGTGCCCTCAGGACATGAGAACCAGGACCTGGAGCGGAAGCAGTGCACATC
GGAGTCTTGGTAGAATTTAGCATGGCCCTGATGAGCAAGCTGGATGGGATCAACAGGCACTCCTTCAACT
CCTTCCGCCTCCGAGTCGGCATAAACCACGGCCCTGTGATTGCTGGAGTATTGGAGCACGCAAGCCTCA
GTATGACATCTGGGAAACACAGTCAATGTTGCCAGCCGATGGAGAGCACCGGAGAGCTTGGGAAAATC
CAGGTTACCGAAGAGACATGCACTATCCTCCAGGGACTCGGATATTCGTGTGAATGCCGTGGGCTGATCA
ACGTCAAAGGCAAGGGAACTGCGGACTTACTTTGTATGTACAGACTGCCAAGTTTCAAGGGCTGGG
GCTAAACTGA
    
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AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA
    
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- Restriction Sites:** Sgfl-RsrII
- ACCN:** NM_001037723
- Insert Size:** 3300 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001037723.3](#), [NP_001032812.2](#)

RefSeq Size: 6033 bp

RefSeq ORF: 3300 bp

Locus ID: 11513

UniProt ID: [P51829](#)

Cytogenetics: 8 43.06 cM

Gene Summary: Catalyzes the formation of cAMP in response to activation of G protein-coupled receptors (Probable). Functions in signaling cascades activated namely by thrombin and sphingosine 1-phosphate and mediates regulation of cAMP synthesis through synergistic action of the stimulatory G alpha protein with GNA13 (PubMed:18541530). Also, during inflammation, mediates zymosan-induced increase intracellular cAMP, leading to protein kinase A pathway activation in order to modulate innate immune responses through heterotrimeric G proteins G(12/13) (PubMed:23178822). Functions in signaling cascades activated namely by dopamine and C5 alpha chain and mediates regulation of cAMP synthesis through synergistic action of the stimulatory G protein with G beta:gamma complex (By similarity). Functions, through cAMP response regulation, to keep inflammation under control during bacterial infection by sensing the presence of serum factors, such as the bioactive lysophospholipid (LPA) that regulate LPS-induced TNF-alpha production. However, it is also required for the optimal functions of B and T cells during adaptive immune responses by regulating cAMP synthesis in both B and T cells (PubMed:20505140).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, 3 and 4 encode the same protein.