

## Product datasheet for RC201976

### ACYP2 (NM\_138448) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ACYP2 (NM\_138448) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** ACYP2  
**Synonyms:** ACYM; ACYP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC201976 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGTCTACCGCCAGTCACTCAAATCCGTGGACTACGAGGTGTTCCGAAGAGTGCAGGGTGTTCGTTCA  
 GAATGTATACAGAAGATGAAGCTAGGAAAATAGGAGTGGTTGGCTGGGTGAAGAATACCAGCAAAGGCAC  
 CGTGACAGGCCAAGTGCAGGGGCCAGAAGACAAAGTCAATTCATGAAGTCCTGGCTGAGCAAGGTTGGA  
 AGCCCTAGTTCTCGATTGACCGCACAACTTTTCTAATGAAAAAACCATCTCTAAGCTTGAATACTCTA  
 ATTTTAGTATTAGATAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC201976 protein sequence  
 Red=Cloning site Green=Tags(s)

MSTAQSLKSVDYEVFGRVQGVCFRMYTEDEARKIGVVGWVKNTSKGTVTGQVQGPEDKVNMSKSWLSKVG  
 SPSSRIDRTNFSNEKTISKLEYSNFSIRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6304\\_g11.zip](https://cdn.origene.com/chromatograms/mk6304_g11.zip)

**Restriction Sites:** SgfI-MluI


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Cloning Scheme:



ACCN: NM\_138448

ORF Size: 297 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

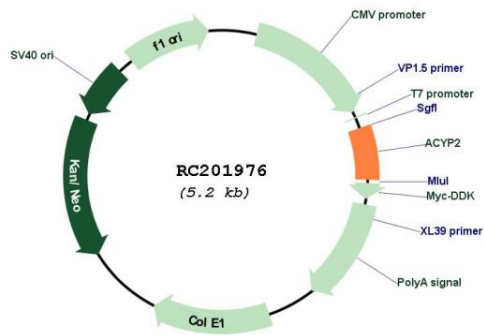
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.

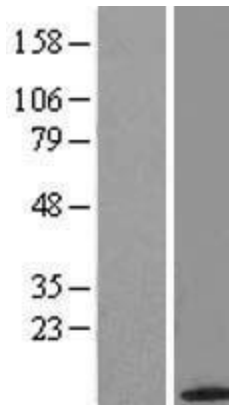
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_138448.4</a>
<b>RefSeq Size:</b>	1238 bp
<b>RefSeq ORF:</b>	300 bp
<b>Locus ID:</b>	98
<b>UniProt ID:</b>	<a href="#">P14621</a>
<b>Cytogenetics:</b>	2p16.2
<b>Protein Pathways:</b>	Pyruvate metabolism
<b>MW:</b>	11.1 kDa
<b>Gene Summary:</b>	<p>Acylphosphatase can hydrolyze the phosphoenzyme intermediate of different membrane pumps, particularly the Ca<sup>2+</sup>/Mg<sup>2+</sup>-ATPase from sarcoplasmic reticulum of skeletal muscle. Two isoenzymes have been isolated, called muscle acylphosphatase and erythrocyte acylphosphatase on the basis of their tissue localization. This gene encodes the muscle-type isoform (MT). An increase of the MT isoform is associated with muscle differentiation. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]</p>

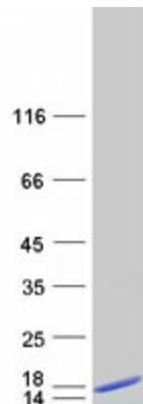
## Product images:



Circular map for RC201976



Western blot validation of overexpression lysate (Cat# [LY408599]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201976 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACYP2 protein (Cat# [TP301976]). The protein was produced from HEK293T cells transfected with ACYP2 cDNA clone (Cat# RC201976) using MegaTran 2.0 (Cat# [TT210002]).