

## Product datasheet for **RC201940**

### AHCYL1 (NM\_006621) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AHCYL1 (NM_006621) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AHCYL1
Synonyms:	DCAL; IRBIT; PPP1R78; PRO0233; XPVKONA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201940 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
 GCCC

ATGTCGATGCCTGACGCGATGCCGCTGCCCGGGTTCGGGGAGGAGCTGAAGCAGGCCAAGGAGATCGAGG  
 ACGCCGAGAAGTACTCCTTCATGGCCACCGTACCAAGGCGCCCAAGAAGCAAATCCAGTTTGTGATGA  
 CATGCAGGAGTTCACCAAATTCACCACAAAACACTGGCCGAAGATCTTTGTCTCGCTCGATCTCACAGTCC  
 TCCACTGACAGCTACAGTTCAGCTGCATCCTACACAGATAGCTCTGATGATGAGGTTTCTCCCCGAGAGA  
 AGCAGCAAACCAACTCCAAGGGCAGCAGCAATTTCTGTGTGAAGAACATCAAGCAGGCAGAAATTTGGACG  
 CCGGGAGATTGAGATTGCAGAGCAAGACATGTCTGCTCTGATTTCACTCAGGAAACGTGCTCAGGGGGAG  
 AAGCCCTTGGCTGGTGTAAAAAGTGGGCTGTACACACATCACAGCCAGACAGCGGTGTTGATTGAGA  
 CACTCTGTGCCCTGGGGCTCAGTGCCGCTGGTCTGCTTGAACATCTACTCAACTCAGAATGAAGTAGC  
 TGCAGCACTGGCTGAGGCTGGAGTTGCAGTGTTCGCTTGAAGGGCGAGTCAGAAGATGACTTCTGGTGG  
 TGTATTGACCGCTGTGTGAACATGGATGGTGGCAGGCCAACATGATCCTGGATGATGGGGGAGACTTAA  
 CCCACTGGGTTTATAAGAAGTATCCAAACGTGTTAAGAAGATCCGAGGCATTGTGGAAGAGAGCGTGAC  
 TGGTGTTCACAGGCTGTATCAGCTCTCCAAAGCTGGGAAGCTCTGTGTTCCGGCCATGAACGTCAATGAT  
 TCTGTTACCAAACAGAAGTTTGATAACTTGTACTGCTGCCGAGAATCCATTTTGGATGGCCTGAAGAGGA  
 CCACAGATGTGATGTTTGGTGGGAAACAAGTGGTGGTGTGTGGCTATGGTGAAGTAGGCAAGGGCTGCTG  
 TGCTGCTCTCAAAGCTCTGGAGCAATGTCTACATTACCGAAATCGACCCCATCTGTGCTCTGCAGGCC  
 TGCATGGATGGTTCAGGGTGGTAAAGCTAAATGAAGTCATCCGCAAGTCGATGTCGTAATAAAGTATGCA  
 CAGGAAATAAGAATGTAGTGACACGGGAGCACTGGATCGCATGAAAAACAGTTGTATCGTATGCAATAT  
 GGGCCACTCCAACACAGAAATCGATGTGACAGCCTCCGCACTCCGGAGCTGACGTGGGAGCGAGTACGT  
 TCTCAGGTGGACCATGTATCTGGCCAGATGGCAAACGAGTTGTCTCCTGGCAGAGGGTCTGCTACTCA  
 ATTTGAGCTGCTCCACAGTTCACCTTTGTTCTGTCCATCACAGCCACAACACAGGCTTTGGCACTGAT  
 AGAACTCTATAATGCACCCGAGGGGCGATACAAGCAGGATGTGTACTTGTCTCCTAAGAAAATGGATGAA  
 TACGTTGCCAGCTTGCATCTGCCATCATTTGATGCCACCTTACAGAGCTGACAGATGACCAAGCAAAT  
 ATCTGGGACTCAACAAAATGGGCCATTCAAACCTAATTATTACAGATAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201940 protein sequence  
 Red=Cloning site Green=Tags(s)

MSMPDAMPLPGVGEELKQAKEIEDAEKYSFMATVTKAPKKQIQFADDMQEFKFKPTKRRSLSRISQS  
 STDSYSSAASYTDSSDEVSPREKQQTNSKGSSNFCVKNIKQAEFGREIEIAEQMSALISLRKRAQGE  
 KPLAGAKIVGCTHITAQTAVLIETLICALGAQCRWSACNIYSTQNEVAAAALAEAGVAVFAWKGESEDDFW  
 CIDRCVNMDGWQANMILDDGDLTHWVYKYPNVFKKIRGIVEESVTGVHRLYQLSKAGLKVAMPNVND  
 SVTKQKFDNLVYCCRESILDGLKRTTDMFVGGKQVVVCGYGEVKGCCAAALKALGAIIVYTEIDPICALQA  
 CMDGFRVVKLNEVIRQVDVITCTGNKNVVTREHLDRMKNSCIVCNMGHSNTEIDVTSLRPELTWERVR  
 SQVDHVIWPDGKRVLLAEGRLNLSCSTVPTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDE  
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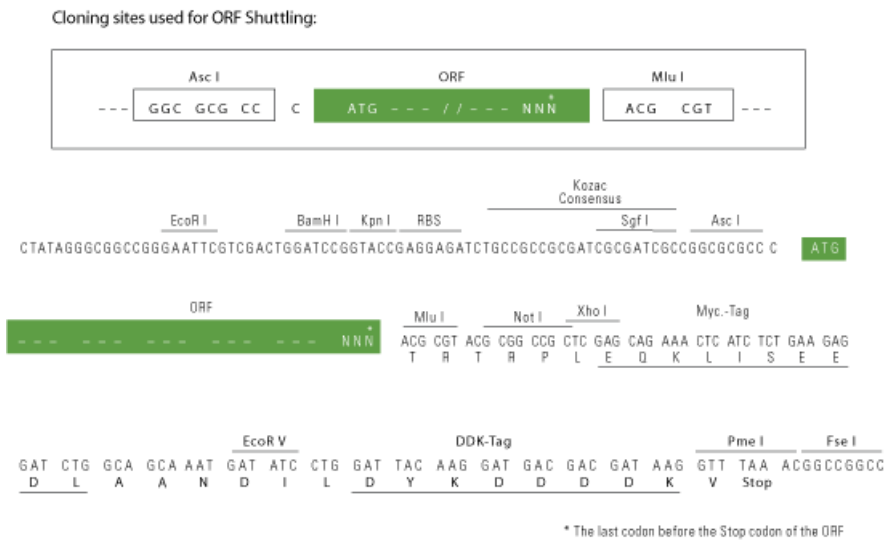
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6274\\_c03.zip](https://cdn.origene.com/chromatograms/mk6274_c03.zip)

**Restriction Sites:**

AscI-MluI

**Cloning Scheme:**


**ACCN:** NM\_006621

**ORF Size:** 1590 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\\_006621.7](#)

**RefSeq Size:** 3949 bp

**RefSeq ORF:** 1593 bp

**Locus ID:** 10768

**UniProt ID:** [O43865](#)

**Cytogenetics:** 1p13.3

**Domains:** AdoHcyase

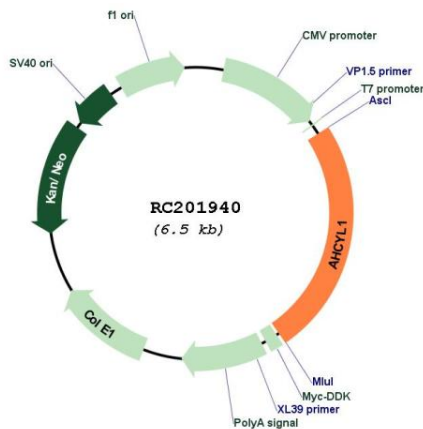
**Protein Families:** Druggable Genome

**Protein Pathways:** Cysteine and methionine metabolism, Metabolic pathways, Selenoamino acid metabolism

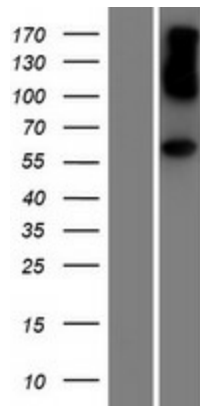
**MW:** 59 kDa

**Gene Summary:** The protein encoded by this gene interacts with inositol 1,4,5-trisphosphate receptor, type 1 and may be involved in the conversion of S-adenosyl-L-homocysteine to L-homocysteine and adenosine. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jun 2011]

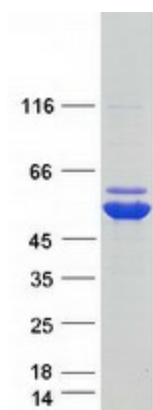
**Product images:**



Circular map for RC201940



Western blot validation of overexpression lysate (Cat# [LY416510]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201940 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AHCYL1 protein (Cat# [TP301940]). The protein was produced from HEK293T cells transfected with AHCYL1 cDNA clone (Cat# RC201940) using MegaTran 2.0 (Cat# [TT210002]).