

Product datasheet for **RC206247**

Acetoacetyl CoA synthetase (AACS) (NM_023928) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acetoacetyl CoA synthetase (AACS) (NM_023928) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acetoacetyl CoA synthetase
Synonyms:	ACSF1; SUR-5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC206247 representing NM_023928
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGTCCAAGGAGGAGCGCCCGGTGCGGAGGAGATCCTGGAGTGCCAGGTGATGTGGGAGCCTGACAGTA
AGAAGAACACGCAGATGGACCGCTTCCGGCGCGCTGTGGGCGCCGCTGCGGCCTGGCGCTGGAGAGTTA
TGATGACTTGTACCATTGGTCCGTTGAGTCATATTCAGACTTCTGGGCAGAGTTCTGAAAATTCAGTGGA
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TCAAAGGCAGTCGGCTCAACTATGCAGAAAACCTCTGCGGCACAAGAGAATGACAGAGTTGCCCTTTA
CATTGCAAGGGAAGGCAAGAGGAAATGTGAAGGTGACTTTTGAAGAGCTGAGGCAAGAAGTGGCTTTG
TTTGCAGCAGCAATGAGGAAAATGGGTGTGAAGAAAGGAGATCGGTTTGTGGTTATTTACCAACAGTG
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CGGTGTGAATGGTGTGCTGGACCGTTTTCTCAAATTCAGCCAAAGCTCATCTTCTCTGTGGAGGCTGTT
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AGAAAGTGGTGGTGATTCTTATGTGTCCTCCAGAGAGAACATAGACCTTCAAAGATTCAAACAGTGT
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CCTGTGCTACACCACGGTCGGCTGGATGATGTGGAAGTGGATGGTGTCCCTTCTGGCCACAGGAGCGGCC
ATGGTCTTGTACGATGGCTCCCCCTGGTGCCACGCCAATGTGCTCTGGGACCTGGTTGACAGGATAG
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ATCCCTTGCCAGCCACACACTTCTGGAACGATGAGAACGGCAACAAGTACAGGAAGGCGTATTTCTCCA
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TGGCCGGAGTGACGGCACCCCTCAACCCCAACGGGGTGGGTTCCGGCAGCTCGGAAATCTATAACATTGTG
GAATCCTTCGAGGAGGTGGAGGACGCCCTGTGTGTCCCCAGTATAACAAGTACAGGAGGAGAGGGTGA
TCCTCTTCTGAAGATGGCTCCGGGCACGCCTTCCAGCCTGACTTGGTTAAGAGGATCCGTGACGCCAT
CCGCATGGGCTTGTCTGCGCGACACGTGCCAGCCTCATCTGGAACCAAGGGCATCCCGTATACGCTC
AACGGCAAGAAAGTGAAGTTGCCGTCAAACAGATCATCGCTGGAAAAGCCGTGGAGCAAGGAGGTGCTT
TCTCGAACCCGAGACCTGGATCTGTACCGGGACATCCCTGAGCTGCAGGGCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206247 representing NM_023928
 Red=Cloning site Green=Tags(s)

MSKEERPGREEILECQVMWEPDSKNTQMDRFRAAVGAACGLALESYDDL YHWSVESYSDFWAEFWKFSG
 IVFSRVYDEVVDTSKGIADVPEWFKGSRNLNYAENLLRHKENDRVALYIAREGKEEIVKVTFEELRQEV
 FAAAMRKMVGKGDVGVYLPNSEHAVEAMLAASIGAIWSSTSPDFGVNGVLDLRF S QIQPKLIFSVEAV
 VYNGKEHNHMEKLQQVVKGLPDLKVVVIPPVSSRENIDLSKIPNSVFLDDFLATGTSEQAPQLEFEQLP
 FSHPLFIMFSSGTTGAPKCMVHSAGGTLIQHLKEHLLHGNTSSDILLCYTTVGMWMMWVMSLLATGAA
 MVLVDGSPLVPTPNVLWDLVDRIGITVLVTGAKWLSVLEEKAMKPVETHSLQMLHTILSTGSPLKAQSYE
 YVYRCIKSSILLGSISSGTDIIISCFMGHNFSLPVYKGEIQARNLGMAVEAWNEEGKAVWGESGELVCTKP
 IPCQPTHFWNDENGNKYRKAYFSKFPGIWAHGDIYCRINPKTGGIVMLGRSDGTLNPNVRFVGSSEIYNIV
 ESFEEVEDSLCVPQYNKYREERVILFLKMASGHAFQPDLVKIRIDAIRMGLSARHVPSLILETKGIPYTL
 NGKKVEVAVKQIIAGKAVEQGGAFSNPETLDLYRDIPELQGF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_023928

ORF Size: 2016 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_023928.5](#)

RefSeq Size: 3329 bp

RefSeq ORF: 2019 bp

Locus ID: 65985

UniProt ID: [Q86V21](#)

Cytogenetics: 12q24.31

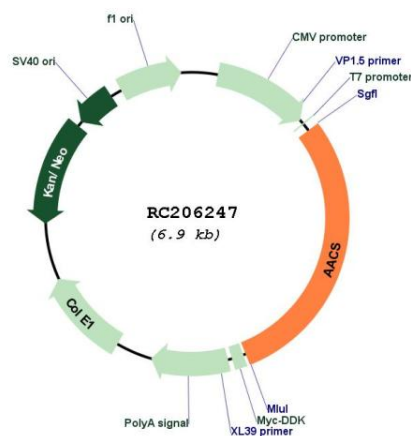
Domains: AMP-binding

Protein Pathways: Butanoate metabolism

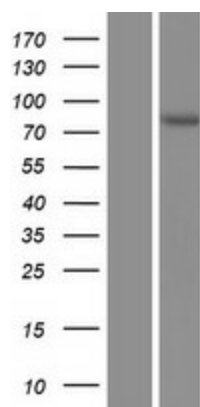
MW: 75 kDa

Gene Summary: Activates acetoacetate to acetoacetyl-CoA. May be involved in utilizing ketone body for the fatty acid-synthesis during adipose tissue development (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC206247



Western blot validation of overexpression lysate (Cat# [LY411433]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206247 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).