

## Product datasheet for **RG206247**

### 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:	TurboGFP
Symbol:	AACS
Synonyms:	ACSF1; SUR-5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG206247 representing NM\_023928  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTCCAAGGAGGAGCGCCCCGGTCGGGAGGAGATCCTGGAGTGCCAGGTGATGTGGGAGCCTGACAGTA  
AGAAGAACACGCAGATGGACCGCTTCCGGGCGGCTGTGGGCGCCGCTGCGGCCTGGCGCTGGAGAGTTA  
TGATGACTTGTACCATTGGTCCGTTGAGTCATATTCAGACTTCTGGGCAGAGTTCTGAAAATTCAGTGGA  
ATTGTCTTCTCACGTGTGTATGATGAGGTTGTGGACACATCGAAAAGGAATCGCAGATGTCCCGAGTGGT  
TCAAAGGCAGTCGGCTCAACTATGCAGAAAACCTCCTGCGGCACAAAGAGAATGACAGAGTTGCCCTTTA  
CATTGCAAGGGAAGGCAAAGAGGAAATTTGTAAGGTGACTTTTGAAGAGCTGAGGCAAGAAGTGGCTTTG  
TTTGCAGCAGCAATGAGGAAAATGGGTGTGAAGAAAGGAGATCGGTTTGTGGTTATTTACCAACAGTG  
AGCACGCTGTGAGGCGATGCTGGCTGCGGCAAGCATTGGTGCCATCTGGAGCTCCACGTCCCGGACTT  
CGGTGTGAATGGTGTGCTGGACCGTTTTCTCAAATTCAGCCAAAGCTCATCTTCTCTGTGGAGGCTGTT  
GTCTATAATGGCAAAGAGCACAACCACATGGAAAAGCTGCAGCAGGTGGTTAAAGGCCTACCAGACTTGA  
AGAAAGTGGTGGTGATTCTTATGTGTCCTCCAGAGAGAACATAGACCTTCAAAGATTCAAAACAGTGT  
GTTTCTGGATGACTTTCTTGCCACCGGCACCAAGTGAAGGCCCCGAGCTGGAGTTCGAGCAGCTGCC  
TTCAGCCACCCACTGTTTCATCATGTTCTCATCGGGCACCACGGGCGCACCAAGTGCATGGTGCATTCCG  
CTGGGGGCACCCTCATCCAGCATCTGAAGGAGCACCTGCTGCACGGCAACATGACCAGCAGTGACATCCT  
CCTGTGCTACACCACGGTCGGCTGGATGATGTGGAAGTGGATGGTGTCCCTTCTGGCCACAGGAGCGGCC  
ATGGTCTTGTACGATGGCTCCCCCTGGTGCACGCCAATGTGCTCTGGGACCTGGTTGACAGGATAG  
GCATCACTGTCTGGTAACTGGGGCAAGTGGCTGTCAGTGTGGAAGAGAAGGCCATGAAGCCGGTGGGA  
AACCCACAGTCTCCAGATGCTCCACACGATCCTGTCCACTGGCTCCCACTGAAAAGCCAGAGCTACGAG  
TATGTCTACAGGTGCATCAAGAGCAGCATCCTCCTGGGCTCCATCTCAGGAGGCACCGACATCATCTCCT  
GCTTCATGGGCCACAATTTTCTCTTCTGTGATAAAGGGGAGATTGAGCCCGGAACCTGGGCATGGC  
CGTGGAAGCGTGAACGAGGAAGGAAAGGCGGTCTGGGGAGAGAGCGGCGAGCTGGTGTGTAAGCCG  
ATCCCTTGCCAGCCACACACTTCTGGAACGATGAGAACGGCAACAAGTACAGGAAGGCGTATTTCTCCA  
AATTCAGGTATCTGGGCTCATGGCGACTACTGCAGAATCAACCCCAAGACCGGGGCATCGTCATGCT  
TGGCCGGAGTGACGGCACCTCAACCCCAACGGGGTGGGTTCCGGCAGCTCGGAAATCTATAACATTGTG  
GAATCCTTCGAGGAGGTGGAGGACAGCCTGTGTGTCCCCAGTATAACAAGTACAGGAGGAGAGGGTGA  
TCCTCTTCTGAAGATGGCTCCGGGCACGCCTTCCAGCCTGACTTGTTAAGAGGATCCGTGACGCCAT  
CCGCATGGGCTTGTCTGCGCGACACGTGCCAGCCTCATCTGGAACCAAGGGCATCCCGTATACGCTC  
AACGGCAAGAAAGTGAAGTTGCCGTCAAACAGATCATCGCTGGAAAAGCCGTGGAGCAAGGAGGTGCTT  
TCTCGAACCCGAGACCTGGATCTGTACCGGGACATCCCTGAGCTGCAGGGCTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG206247 representing NM\_023928  
 Red=Cloning site Green=Tags(s)

MSKEERPGREEILECQVMWEPDSKNTQMDRFRAAVGAACGLALESYDDL YHWSVESYSDFWAEFWKFSG  
 IVFSRVYDEVVDTSGGIADVPEWFKGSRNLNYAENLLRHKENDRVALYIAREGKEEIVKVTFEELRQEVAL  
 FAAAMRKMGVKKGDRVVGYPNSEHAVEAMLAASIGAIWSSTSPDFGVNGVLDRF S QIQPKLIFSVEAV  
 VYNGKEHNHMEKLQQVVKGLPDLKVVVIPPVSSRENIDL SKIPNSVFLDDFLATGTSEQAPQLEFEQLP  
 FSHPLFIMFSSGTTGAPKCMVHSAGGTLIQHLKEHLLHGNMTSSDILLCYTTVGWMMWNMVSLLATGAA  
 MVLYDGSPLVPTPNVLWDLVDRIGITVLVTGAKWLSVLEEKAMKPVETHSLQMLHTILSTGSPLKAQSYE  
 YYYRCIKSSILLGSISGGTDIISCFMGHNFSLPVYKGEIQARNLGMAVEAWNEEGKAVWGESGELVCTKP  
 IPCQPTHFWDENGNKYRKAYFSKFPGIWAHGDIYCRINPKTGGIVMLGRSDGTLNPNVGRFVSSEIYNIV  
 ESFEEVEDSLCVPQYNKYREERVILFLKMASGHAFQPDLVKRIRDAIRMGLSARHVPSLILETKGIPYTL  
 NGKKVEVAVKQIIAGKAVEQGGAFSNPETLDLYRDIPELQGF

TRTRPLE - GFP Tag - V

Restriction Sites:

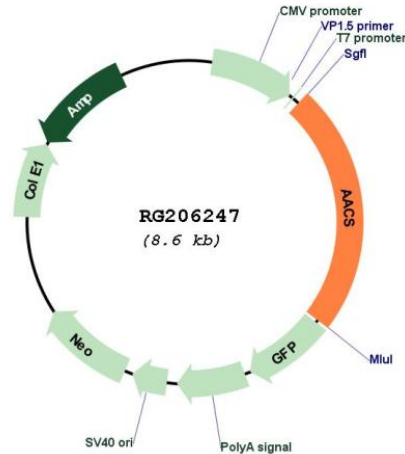
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



## Plasmid Map:



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:	<a href="#">Q86V21</a>
Cytogenetics:	12q24.31
Domains:	AMP-binding
Protein Pathways:	Butanoate metabolism
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]