

Product datasheet for **SC116704**

HMGCS2 (NM_005518) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HMGCS2 (NM_005518) Human Untagged Clone
Tag:	Tag Free
Symbol:	HMGCS2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF:

```

>OriGene ORF sequence for NM_005518 edited
GCGGCCGCGAATTCGGCACGAGGCTGAAGTCTGGGTTTCTGCTTCTGCTCCTCTGGAGATG
CAGCGTCTGTTGACTCCAGTGAAGCGCATTCTGCAACTGACAAGAGCGGTGCAGGAAACC
TCCCTCACACCTGCTCGCTGCTCCAGTAGCCACCAAAGGTTTTCTACAGCCTCTGCT
GTCCCCCTGGCCAAAACAGATACTTGGCCAAAGGACGTGGGCATCCTGGCCCTGGAGGTC
TACTTCCCAGCCCAATATGTGGACAACTGACCTGGAGAAGTATAACAATGTGGAAGCA
GGAAAGTATACAGTGGGCTTGGCCAGACCCGTATGGGCTTCTGCTCAGTCCAAGAGGAC
ATCAACTCCCTGTGCCTGACGGTGGTGAACGGCTGATGGAGCGCATACAGCTCCCATGG
GACTCTGTGGGCAGGCTGGAAGTAGGCACTGAGACCATCATTGACAAGTCCAAGCTGTC
AAAACAGTGTCTATGGAAGTCTTCCAGGATTCAGGCAATACTGATATTGAGGGCATAGAT
ACCACCAATGCCTGCTACGGTGGTACTGCCTCCCTCTTCAATGCTGCCAACTGGATGGAG
TCCAGTTCCTGGGATGGTCGTTATGCCATGGTGGTCTGTGGAGACATTGCCGTCTATCCC
AGTGGTAATGCTCGTCCCACAGGTGGGGCCGGAGCTGTGGCTATGCTGATTGGGCCCAAG
GCCCTCTGGCCCTGGAGCGAGGGCTGAGGGGAACCCATATGGAGAATGTGTATGACTTC
TACAAACCAAATTTGGCCTCGGAGTACCCAATAGTGGATGGGAAGCTTTCCATCCAGTGC
TACTTGGCGGCCCTGGATCGATGTTACACATCATACCGTAAAAAATCCAGAATCAGTGG
AAGCAAGCTGGCAGCGATCGACCCTTACCCCTGACGATTTACAGTACATGATCTTTCAT
ACACCCTTTTGAAGATGGTCCAGAAGTCTCTGGCTCGCCTGATGTTCAATGACTTCCTG
TCAGCCAGCAGTGACACACAAACCAGCTTATATAAGGGGCTGGAGGCTTTCGGGGGGCTA
AAGCTGGAAGACACCTACACCAACAAGGACCTGGATAAAGCACTTCTAAAGGCCTCTCAG
GACATGTTGACAAGAAAACCAAGGCTTCCCTTACCTCTCCACTCACAATGGGAACATG
TACACCTCATCCCTGTACGGGTGCCTGGCCTCGCTTCTGTCCCACCACTTGCCCAAGAA
CTGGCTGGCTCCAGGATTGGTGCCTTCTTTATGGCTCTGGTTTAGCAGCAAGTTTCTTT
TCATTTGAGTATCCCAGGATGCTGCTCCAGGCTCTCCCCTGGACAAGTTGGTGTCCAGC
ACATCAGACCTGCCAAAACGCCTAGCCTCCCGAAAGTGTGTCTCCTGAGGAGTTCACA
GAAATAATGAACCAAAGAGAGCAATTCTACCATAAGGTGAATTTCTCCACCTGGTGAC
ACAAACAGCCTTTTCCCAGGTACTTGGTACCTGGAGCGAGTGGACGAGCAGCATCGCCGA
AAGTATGCCCCGGCTCCCGTCTAAAGGTGTTCTGCAGATCCATGGAAAGCTTCTGGGAA
ACGTATGCTAGCAGAGCTTCTCCCGTGAATCATATTTTAAAGATCCCACTCTTAGCTGG
TAAATGAATTTGAATCGACATAGTAGCCCCATAAGCATCAGCCCTGTAGAGTGAGGAGCC
ATCTCTAGCGGGCCCTTCAATTCCTCTCCATGCTGCAATCACTGTCCTGGGCTTATGGTGC
TATGGACTAGGGTCTTTGTGAAAGAGCAAGATGGAGCAATGGAGAGAAGACCTCTTCC
TGAATCACTGGACTCCAGAAATGTGCATGCAGATCAGCTGTTGCCTTCAAGATCCAGATA
AACTTTCCTGTATGTGTAGAACTTTATTATTATTAATATTGTTAAACTTCTGTGCTGT
TCCTGTGAATCTCCAAATTTTGTACCTTGTTTAAGGCTAATATATAGCAATTAAGAA
GAGAAAGAGGAAAAAAAAAAAAAAAAAACTCGA
    
```

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_005518 unedited</p> <pre>TTGTTTCANNATATTTGTNNAATACGACNCACTATAGGGCGGCCGGAATTCGGCACGAG GCTGAACTGCTGGGTTTCTGCTTCTCCTCGGAGATGCAGCGTCTGTTGACTCCAGTGA AGCGCATTCTGCAACTGACAAGAGCGGTGCAGGAAACCTCCCTCACACCTGCTCGCTGC TCCCAGTAGCCCACAAAGGTTTTCTACAGCCTCTGCTGTCCCTGGCCAAAACAGATA CTTGGCCAAAGGACGTGGGCATCCTGGCCCTGGAGGTCTACTTCCAGCCCAATATGTGG ACCAAACCTGACCTGGAGAAGTATAACAATGTGGAAGCAGGAAAGTATACAGTGGGCTTGG GCCAGACCCGTATGGGCTTCTGCTCAGTCCAAGAGGACATCAACTCCCTGTGCCTGACGG TGGTGCAACGGCTGATGGAGCGCATACAGCTCCCATGGGACTCTGTGGGAGGCTGGAAG TAGGCACTGAGACCATCATTGACAAGTCCAAGCTGTCAAACAGTGCTCATGGAACCTCT TCCAGGATTCAGGCAATACTGATATTGAGGGCATAGATACCACCAATGCCTGCTACGGTG GTACTGCCTCCCTCTTCAATGCTGCCAAGTGGATGGAGTCCAGTTCCTGNGATGGTCGTT ATGCCATGGTGGTCTGTGGAGACATTGCCGTCTATCCAGTGGTAAATGCTCGTCCCACAG GTGGGGCCGGAGCTGTGGCTATGCTGATTGGGCCCAAAGCCCTCTGGCCCTGGAGCGAG GGCTGAAGGGAACCCATATGGAGAATGTGTATGACTTCTACAAACCAAATTTGGCCTCGG AGTACCCCATAGTGGATGGGAAGCTTTTCATCCAATGCTACCTGCCGGCCTTGGTATCGA GTTACACATATACCGGAAAAAT</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_005518 unedited</p> <pre>CGGCCGCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTCTCTTTCTCTTTTTAATT GCTATATATTAGCCTTAAAAACAAGGTACAAAATTTGGAGATTCACAGGAACAGCACAGAA GTTTAAACAATATTAATAATAATAAAGTTCTAACACATGACAGGAAAGTTTATCTGGATCT TGAAGGCAACAGCTGATCTGCATGCACATTTCTGGAGTCCAGTGATTCAGGAAGAGGTCT TCTCTCCATTGCTCCATCTTCTCTTTCAAAAGGACCCCTAGTCCATAGCACCATAAGC CCAGGACAGTGATTGCAGCATGGAGAGGAATGAAGGGCCCGCTAGAGATGGCTCCTCACT CTACAGGGCTGATGCTTATGGGGCTACTATGTCGATTCAAATTCATTTACCAGCTAAGAG TGGGATCTTAAAAATATGATTACGGGGGAGAAGCTCTGTAGCATACGTTCCCCAGGAAG CTTTCCATGGATCTGCAAACACCTTTAGACGGGACGCCGGGCATACTTTTCGGCGATGCT GTTTCGCTCACTCGCTCCAGGTACCAAGTACCTGCGAAAAGGCTGTTTGTGCCACCACGTG GGCAGAAATCCACCTTATGGTACAATTGCCCTCTTTCGCTCATTATTCCTGTGAACCCCT TACGAGACACCCACTTTTGGGAAGGCTCCGCGCCTCGCCAGGTCTCGAGTCTTGGACAC CAACTCGATCAGGGGAGACCCTGGATCCATTCTTGGCAACTTTAATGAACACAACCCCC CGTTCATCCCCCACCATATATCCCTTTCTCTGTCCCCCCCCCGCCTTATTTCCCA TTATTTTGTCTCTCTCCCCGTTGAGCTTTCTTTACCCTGCCCGCCGTTCCGCTATT CCCCCCCCCACTCTGCTTTTGGCCACCCCCCCCCCTCATTTTCCCCC</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_005518
Insert Size:	2190 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).
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:	<ol style="list-style-type: none">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_005518.2 , NP_005509.1
RefSeq Size:	2082 bp
RefSeq ORF:	1527 bp
Locus ID:	3158
UniProt ID:	P54868
Cytogenetics:	1p12
Domains:	HMG_CoA_synt
Protein Families:	Druggable Genome
Protein Pathways:	Butanoate metabolism, Metabolic pathways, PPAR signaling pathway, Synthesis and degradation of ketone bodies, Terpenoid backbone biosynthesis, Valine, leucine and isoleucine degradation
Gene Summary:	<p>The protein encoded by this gene belongs to the HMG-CoA synthase family. It is a mitochondrial enzyme that catalyzes the first reaction of ketogenesis, a metabolic pathway that provides lipid-derived energy for various organs during times of carbohydrate deprivation, such as fasting. Mutations in this gene are associated with HMG-CoA synthase deficiency. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Oct 2009]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>