

Product datasheet for **RC201500**

OXSM (NM_017897) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OXSM (NM_017897) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OXSM
Synonyms:	CEM1; FASN2D; KASI; KS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201500 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCCAACCTGCCTGCAAAATTTCTGAAAATTACAAGCACTCGTCTTCTATGTTCAAGATTATGCCAAC
 AGTTAAGAAGTAAAAGGAAGTTTTTCGGAAGTGTGCCAATATCCAGATTGCATAGGCGAGTTGTCATTAC
 AGGCATTGGCTTAGTGACTCCTCTTGGTGTGGAACCTCACCTGGTTTGGGATCGTCTTATCGGAGGAGAG
 AGTGAATTGTTTCACTGGTTGGTGAAGAGTATAAGAGTATCCCTTGCAGTGTGCTGCTTATGTGCCAA
 GAGGTAGTGATGAAGGTCAAGTCAATGAACAAAATTTGTGTCCAAATCAGATATCAAGTCCATGTCTTC
 TCCCACCATCATGGCCATTGGGGCTGCAGAATTAGCCATGAAGGATTCTGGCTGGCATCCTCAGTCAGAA
 GCTGATCAAGTGGCTACTGGTGTGCAATTGGCATGGGAATGATTCCTCTGAAGTTGTTTCTGAAACTG
 CTTTGAATTTTTCAGACAAAAGGTTACAATAAAGTTAGCCATTTTTTGTCCCTAAGATTCTGGTCAATAT
 GGCAGCAGGCCAGGTCAAGTTCGATATAAACTCAAGGGCCAAATCATGCAGTATCCACAGCCTGTACC
 ACAGGAGCTCATGCTGTGGGAGACTCATTAGATTTATAGCCCATGGTGTGCTGATGTGATGGTGGCTG
 GAGGTACAGATTCTGTATTAGCCCTTTATCTCTTGTGGTTTTCCAGAGCCCGGGCTCTGAGCACAAA
 CTCAGATCCCAAGTTGGCATGTCGACCATTTTCATCCAAAGAGAGATGGTTTTGTAATGGGAGAAGGTGCA
 GCTGTGCTGGTGTGGAAGAATAGAACATGCTGTTCAAAGAAGAGCCCGGATCTATGCAGAAGTTTTGG
 GCTATGGACTCTCAGGTGATGCTGGTACATAACTGCCCTGATCCTGAAGGAGAAGGTGCCTTAAGGTG
 TATGGCTGCTGCTTTAAAAGATGCAGGTGTGCAGCCTGAGGAGATATCCTATATCAATGCACATGCTACT
 TCCACACCATGGGAGATGCTGCTGAAAACAAAGCTATCAAACATCTCTTCAAAGACCATGCATATGCC
 TTGCAGTTTTCTCAACTAAGGGAGCAACAGGACATCTGCTGGGAGCTGCAGGGGCAGTCGAGGCAGCTTT
 TACCACATTAGCTTGTATTATCAAAAACCTACCACCTACTTTAAACCTGGATTGTTTCGGAACCCAGAATTT
 GATCTCAACTATGTTCCACTAAAGGCACAGGAATGAAAACTGAGAAAAGATTTATTGGCCTCACCAATT
 CCTTTGGTTTTGGTGGTACTAATGCAACACTTTGTATTGCTGGACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201500 protein sequence
 Red=Cloning site Green=Tags(s)

MSNCLQNFLKITSTRLLCSRLCQQLRSKRKFFGTVPISRLHRRVITGIGLVTPPLVGVGTHLVWDRLIGGE
 SGIVSLVGEYKSIPCSVAAYVPRGSDEGQFNEQNFVSKSDIKSMSSPTIMAIGAAELAMKDSGWHPOSE
 ADQVATGVAIGMIMPLEVVSETALNFQTKGYNKVSPPFVPKILVNMAAGQVSIRYKLGPNHAVSTACT
 TGAHAVGDSFRFIAHGDADVMVAGGTDSCISPLSLAGFSRARALSTNSDPKLACRPFHPKRDGFVMGEGA
 AVLVL EYEYEHAVQRRARIYAEVLGYGLSGDAGHITAPDPEGEGALRCMAAALKDAGVQPEEISYINAHAT
 STPLGDAENKAIKHLFKDHAYALAVSSTKGATGHLLGAAGAVEAAFTLACYYQKLPPTLNLDCEPEF
 DLNVVPLKAQEWKTEKRFI GLTNSFGFGGTNATLCIAGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6301_h12.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_017897

ORF Size: 1377 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_017897.3](#)

RefSeq Size: 1537 bp

RefSeq ORF: 1380 bp

Locus ID: 54995

UniProt ID: [Q9NWX1](#)

Cytogenetics: 3p24.2

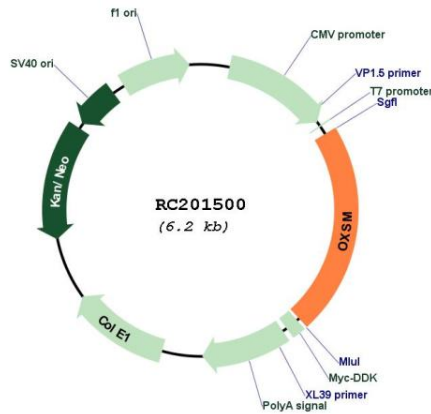
Protein Families: Druggable Genome

Protein Pathways: Fatty acid biosynthesis, Metabolic pathways

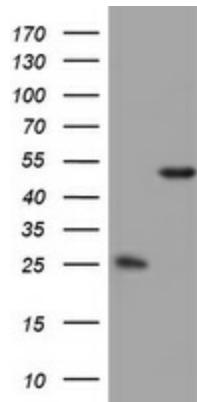
MW: 48.8 kDa

Gene Summary: This gene encodes a beta-ketoacyl synthetase. The encoded enzyme is required for elongation of fatty acid chains in the mitochondria. Alternatively spliced transcript variants have been described.[provided by RefSeq, Feb 2009]

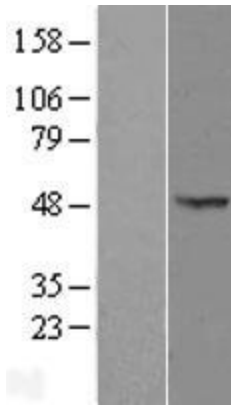
Product images:



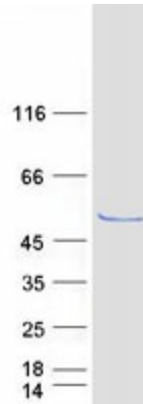
Circular map for RC201500



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY OXSM (Cat# RC201500, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OXSM (Cat# [TA802243]). Positive lysates [LY413479] (100ug) and [LC413479] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413479]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201500 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OXSM protein (Cat# [TP301500]). The protein was produced from HEK293T cells transfected with OXSM cDNA clone (Cat# RC201500) using MegaTran 2.0 (Cat# [TT210002]).