

Product datasheet for **SC303352**

SOAT 2 (SOAT2) (NM_003578) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SOAT 2 (SOAT2) (NM_003578) Human Untagged Clone
Tag:	Tag Free
Symbol:	SOAT 2
Synonyms:	ACACT2; ACAT2; ARGP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_003578 edited
 ATGGAGCCAGGCGGGGCCGCTCTGCGTCTGCAGAGGACAGAAGGGCTGGGAGGGGAGCGG
 GAGCGCCAACCCTGTGGAGATGGAACACTGAGACGCACAGACCCCGGACTTGGTACAA
 TGGACCCGACACATGGAGGCTGTGAAGGCACAATTGCTGGAGCAAGCGCAGGGACAACCTG
 AGGGAGCTGCTGGATCGGGCCATGCGGGAGGCTATACAATCCTACCCATCACAAGACAAA
 CCTCTGCCCCACCTCCCCAGGTTCTTGAGCAGGACCCAGGAGCCATCCCTGGGGAAA
 CAGAAAGTTTTTCATCATCCGCAAGTCCCTGCTTGATGAGCTGATGGAGGTGCAGCATTTT
 CGCACCATCTACCACATGTTTCATCGCTGGCCTGTGTCTTCATCATCAGCACCCCTGGCC
 ATCGACTTCATTGATGAGGGCAGGCTGCTGCTGGAGTTTGACCTACTGATCTTCAGCTTC
 GGACAGCTGCCATTGGCCTGGTACCTGGGTGCCATGTTTCTGTCCACCCTGTTGGCG
 CCGTACCAGGCCCTACGGCTGTGGGCCAGGGCACCTGGACGCAGGCGACGGCCCTGGGC
 TGTGCGCTGCTAGCCGCCACGCCGTGGTGTCTGCGCGCTGCCGGTCCACGTGGCCGTG
 GAGCATCAGCTCCCGCCGCCCTCCGTTGTCTGCTGGTCTTCGAGCAGGTTAGGTTCTG
 ATGAAAAGCTACTCCTTCTGAGAGAGGCTGTGCCTGGGACCCTTCGTGCCAGACGAGGT
 GAGGGGATCCAGGCCCCAGTTTCTCCAGCTACCTCTACTTCTTCTGCCAACACTC
 ATCTACAGGGAGACTTACCCTAGGACGCCCTATGTCAGGTGGAATTATGTGGCCAAGAAC
 TTTGCCAGGCCCTGGGATGTGTCTATGCCTGCTTCATCCTGGGCCGCCCTGTGTT
 CCTGTCTTTGCCAACATGAGCCGAGAGCCCTTCAGCACCCGTGCCCTGGTGTCTCTATC
 CTGCATGCCACGTTGCCAGGCATCTTCATGCTGCTGCTCATCTTCTTGCCTTCTCCAT
 TGCTGGCTCAACGCCCTTGGCCGAGATGCTACGATTTGGAGACAGGATGTTCTACCGGGAC
 TGGTGGAACTCAACGCTCTTCTCCAACACTACCGCACTTGGAACTGGTGGTCCATGAC
 GTAGCCATGCTGGGTGTGTTCTGCTCCGAGTGGCCATGAGTATATCTTCTGCTTCT
 GTCTGGGGTTCTTCTATCCCGTATGCTGATACTCTTCTTGTGATTGGAGGAATGTTG
 AACTTCATGATGATGACAGCGCACCGCCCGCATGGAACGTGCTGATGTGGACCATG
 CTGTTTCTAGGCCAGGAATCCAGGTCAGCCTGTACTGCCAGGAGTGGTACGCACGGCGG
 CACTGCCCTTACCCAGGCAACTTTCTGGGGGCTGGTGACACCTCGATCTTGGTCTG
 CATACCTAG

Restriction Sites: Please inquire

ACCN: NM_003578

Insert Size: 1600 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_003578.2](#), [NP_003569.1](#)

RefSeq Size: 2040 bp

RefSeq ORF: 1569 bp

Locus ID: 8435

UniProt ID: [O75908](#)

Cytogenetics: 12q13.13

Protein Families: Transmembrane

Protein Pathways: Steroid biosynthesis

Gene Summary: Summary: This gene is a member of a small family of acyl coenzyme A:cholesterol acyltransferases. The gene encodes a membrane-bound enzyme localized in the endoplasmic reticulum that produces intracellular cholesterol esters from long-chain fatty acyl CoA and cholesterol. The cholesterol esters are then stored as cytoplasmic lipid droplets inside the cell. The enzyme is implicated in cholesterol absorption in the intestine and in the assembly and secretion of apolipoprotein B-containing lipoproteins such as very low density lipoprotein (VLDL). Several alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Jul 2008]