

Product datasheet for **SC117834**

FATP2 (SLC27A2) (NM_003645) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FATP2 (SLC27A2) (NM_003645) Human Untagged Clone
Tag:	Tag Free
Symbol:	FATP2
Synonyms:	ACSVL1; FACVL1; FATP2; hFACVL1; HsT17226; VLACS; VLCS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_003645 edited
GGCGGCCGGAATTCGGCACGAGGCTCTGTCTTCCCTTCATCTCACGCGAGCCCGGCGT
CCCCGCCGCTGCGCCCGGCGCAGCCCGCCAGTCCGCCGGAGCCCGCCAGTCGCCGCG
CTGCACGCCCCGGGTGAACCTCTGCCCTCGCTGGGACAGAGGGCCCCGAGCCGTCATG
CTTTCGCCATCTACACAGTCTGGCGGACTGCTGTTCTGCCGCTCCTGGTGAACCTC
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GCGCAGGTGGACCGCGCAGCAATCAAGTGGCCCGGGCGCTGCACGACCCTCGGCCTG
CGCCAGGGAGACTGCGTGGCGCTCCTTATGGGTAAAGAGCCGGCCTACGTGTGGTGTGG
CTGGGGCTGGTGAAGCTGGGCTGTGCCATGGCGTGCCTCAATTACAACATCCGCGCGAAG
TCCCTGCTGCACTGCTTCCAGTGTGCGGGGCGAAGGTGCTGCTGGTGTGCCAGAACTA
CAAGCAGTGTGAAGAGATACTGCAAGCCTTAAAAAGATGATGTGCCATCTATTAT
GTGAGCAGAACTTCTAACACAGATGGGATTGACTCTTTCCTGGACAAAGTGGATGAAGTA
TCAACTGAACCTATCCAGAGTCATGGAGTCTGAAGTCACTTTTCCACTCCTGCCTTA
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ATATGGTATGGAAGTGGCCTCACTTTTGTAAAGCGATTGAAGGCAGATGATGTCATCTAT
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TCACCACAGAAACCAATGACCGTGATCATAAAGTGAGACTGGCACTGGGAAATGGCTTA
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GGTCGCATTGGCATGGCCTCCATCAAAATGAAAGAAAACCATGAATTTGATGGAAAGAAA
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GGCTTTAACCTGCTGTCAATCAAGATGCCTTGTATTTCTGGATGACACAGCAAAAATG
TATGTGCCTATGACTGAGGACATCTATAATGCCATAAGTGCTAAAACCTGAAACTCTGA
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CGTAAAGGGAGACTTTTTTAAATAACAGTTGAGTCTTTGCAAGTAAAAAGATTTAGAGAT
TATTTTTTTCAGTGTGCACCTACTGTTTGTATTTGCAAACTGAGCTTGTGGAGGGAAGG
CATTATTTTTTAAATACTTAGTAAATTAATGAA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003645 unedited
 GTTCACATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCTCTGTCTTC
 CCCTTCATCTCACGCGAGCCCGGCGTCCCGCCGCGTGCGCCCGGCGCAGCCCGCCAGTC
 CGCCCGGAGCCACTCCCAGTCGCGCGCTGCACGCCCGGGTGAACCTCTGCCCTCGCT
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 CTGTTCCCTGCCGCTCCTGGTGAACCTCTGCTGCCATACTTCTCCAGGACATAGGCTAC
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 CGCACCATCCTGCGGGCGTTCTGGAGAAAGCGCGCCAGACGCCACACAAGCCTTTTCTG
 CTCTCCGCGACGAGACTCTCACCTACGCGCAGGTGGACCGCGCAGCAATCAAGTGCC
 CGGGCGCTGCACGACCACCTCGGCCTGCGCCAGGGAGACTGCGTGGCGCTCCTTATGGT
 AACGAGCCGGCTACGTGTGGCTGTGGTGGGGCTGGTGAAGCTGGGCTGTGCCATGGCG
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 AAGGTGCTGCTGGTGTGCCAGAATAACAAGCAGCTGTGAAGAGATACTGCCAAGCCTT
 AAAAAAGATGATGTGCCATCTATTATGTGAGCAGAATCTACACAGATGGGATTGACT
 CTTTCTGGACAAGTGGATGAAGTATCAACTGAACCTATCCAGAGTCATGGGAGTCTGA
 AGTACACNTTTTCCACTCCTGCCTTATACATTTATACTTCTGGAACCAACAGGTCTTCAA
 GCAGCCATGATCACTCATCAGCGCATATG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003645 unedited
 CGGCCCGTAATCTAAAGTCGATTTTTTTTTTTTTTTTTTTTAAACATGTTGGTGTTCATT
 AATTTACTAAGTATTTAAAAAATAATGCCTTCCCTCCAACAAGCTCAGTTTGCAAATAC
 AAACAGTAGGTGCACACTGAAAAAATAATCTCTAAATCTTTTTACTTGCAAAGACTCAA
 CTGTTATTTAAAAAAGTCTCCCTTACGGGTATGCAAATTTCTACAAAATTTCTCACA
 ATCTTCAATCAAATTAAGTTGGATTATCAAGTGGCTGTCCATTGAGTTTCTTTCTGG
 AAATGTTGAGTTATCCTCCTGGGAATATTCAGAGTTTCAGGGTTTTAGCACTTATGGCAT
 TATAGATGTCCTCAGTCATAGGCACATACATTTTTGCTGTGTCATCCAAGAAATACAAGG
 CATCTTTGATGACAGCAGGGTTAAAGCCCTCCTCCACCAGGGTCATTTTGCGGTGTTTAA
 AAGTCCAGTGATCTCAATGGTGTCTGTATTCTTAGAAACCGGGGCCTTGCATAACTAG
 GTAGGTAATCAGCAATGTGCTGAAAGAGTTTCTTCCATCAAATTCATGGTTTTCTTTCA
 TTTTGATGGAGGCCATGCCAATGCGACCCTCATGATCTGGCAGCATGCCTCCATAACAT
 TTACTTCTTGGACAAAATCAACCAGTCCAACCTGTATCAGCAACTTCAGTGGTGGCCACAT
 TTTCCCTTTTCCACCGAATGTATCTCCAACCTGTGCTGGAATAGATGAAATTTTCATG
 GTCAACCATTAAGAGATCTCCACTGTGAAATAGAGTCTCCTTTCTTAAGACATCTCTCAG
 TTTTCTTCTGTCTGAGCCTTGTCCAGCATAACCATAATGGTGTAGGTGTGATTTG
 CAAACACGAGTCCACTTCACCTTGGGACTCTGACGCATATCATTTTATCAGGAAGGTAC
 TCCTTTCCATCATAATTATAG

Restriction Sites:

NotI-NotI

ACCN:

NM_003645

Insert Size:

2440 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:

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_003645.2](#), [NP_003636.1](#)

RefSeq Size: 2343 bp

RefSeq ORF: 1863 bp

Locus ID: 11001

UniProt ID: [O14975](#)

Cytogenetics: 15q21.2

Domains: AMP-binding

Protein Families: Transmembrane

Protein Pathways: PPAR signaling pathway

Gene Summary: The protein encoded by this gene is an isozyme of long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme activates long-chain, branched-chain and very-long-chain fatty acids containing 22 or more carbons to their CoA derivatives. It is expressed primarily in liver and kidney, and is present in both endoplasmic reticulum and peroxisomes, but not in mitochondria. Its decreased peroxisomal enzyme activity is in part responsible for the biochemical pathology in X-linked adrenoleukodystrophy. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2009]

Transcript Variant: This variant (1) represents the predominant transcript and encodes the longer isoform (1).