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Product datasheet for SC117368

ACSL3 (NM_004457) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL3 (NM_004457) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACSL3
Synonyms:	ACS3; FACL3; LACS 3; LACS3; PRO2194
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF: >NCBI ORF sequence for NM_004457, the custom clone sequence may differ by one or more nucleotides

ATGAATAACCACGTGTCTTCAAAACCATCTACCATGAAGCTAAAACATACCATCAACCCTATTCTTTTAT
ATTTTATACATTTTCTAATATCACTTTATACTATTTTAACATACATTCCGTTTTATTTTTTCTCCGAGTC
AAGACAAGAAAAATCAAACCGAATTAAAGCAAAGCCTGTAAATTCAAAACCTGATTCTGCATACAGATCT
GTTAATAGTTTGGATGGTTTGGCTTCAGTATTATACCCTGGATGTGATACTTTAGATAAAGTTTTTACAT
ATGCAAAAAACAAATTTAAGAACAAAAGACTCTTGGGAACACGTGAAGTTTTAAATGAGGAAGATGAAGT
ACAACCAAATGGAAAAATTTTTAAAAAGGTTATTCTTGGACAGTATAATTGGCTTTCCTATGAAGATGTC
TTTGTTCGAGCCTTTAATTTTGGAAATGGATTACAGATGTTGGGTCAGAAACCAAAGACCAACATCGCCA
TCTTCTGTGAGACCAGGGCCGAGTGGATGATAGCTGCACAGGCGTGTTTTATGTATAATTTTCAGCTTGT
TACATTATATGCCACTCTAGGAGGTCCAGCCATTGTTCATGCATTAAATGAAACAGAGGTGACCAACATC
ATTACTAGTAAAGAACTCTTACAAACAAAGTTGAAGGATATAGTTTCTTTGGTCCCACGCCTGCGGCACA
TCATCACTGTTGATGGAAAGCCACCGACCTGGTCCGAGTTCCCCAAGGGCATCATTGTGCATACCATGGC
TGCAGTGGAGGCCCTGGGAGCCAAGGCCAGCATGGAAAACCAACCTCATAGCAAACCATTGCCCTCAGAT
ATTGCAGTAATCATGTACACAAGTGGATCCACAGGACTTCCAAAGGGAGTCATGATCTCACATAGTAACA
TTATTGCTGGTATAACTGGGATGGCAGAAAGGATTCCAGAACTAGGAGAGGAAGATGTCTACATTGGATA
TTTGCCTCTGGCCCATGTTCTAGAATTAAGTGCTGAGCTTGTCTGTCTTTCTCACGGATGCCGCATTGGT
TACTCTTCACCACAGACTTTAGCAGATCAGTCTTCAAAAATTAAAAAAGGAAGCAAAGGGGATACATCCA
TGTTGAAACCAACACTGATGGCAGCAGTTCCGGAAATCATGGATCGGATCTACAAAAATGTCATGAATAA
AGTCAGTGAAATGAGTAGTTTTCAACGTAATCTGTTTATTCTGGCCTATAATTACAAAATGGAACAGATT
TCAAAAGGACGTAATACTCCACTGTGCGACAGCTTTGTTTTCCGGAAAGTTCGAAGCTTGCTAGGGGGAA
ATATTCGTCTCCTGTTGTGTGGTGGCGCTCCACTTTCTGCAACCACGCAGCGATTCATGAACATCTGTTT
CTGCTGTCCTGTTGGTCAGGGATACGGGCTCACTGAATCTGCTGGGGCTGGAACAATTTCCGAAGTGTGG
GACTACAATACTGGCAGAGTGGGAGCACCATTAGTTTGCTGTGAAATCAAATTAAAAAACTGGGAGGAAG
GTGGATACTTTAATACTGATAAGCCACACCCCAGGGGTGAAATTCTTATTGGGGGCCAAAGTGTGACAAT
GGGGTACTACAAAAATGAAGCAAAAACAAAAGCTGATTTCTTTGAAGATGAAAATGGACAAAGGTGGCTC
TGTACTGGGGATATTGGAGAGTTTGAACCCGATGGATGCTTAAAGATTATTGATCGTAAAAAGGACCTTG
TAAAACTACAGGCAGGGGAATATGTTTCTCTTGGGAAAGTAGAGGCAGCTTTGAAGAATCTTCCACTAGT
AGATAACATTTGTGCATATGCAAACAGTTATCATTCTTATGTCATTGGATTTGTTGTGCCAAATCAAAAG
GAACTAACTGAACTAGCTCGAAAGAAAGGACTTAAAGGGACTTGGGAGGAGCTGTGTAACAGTTGTGAAA
TGGAAAATGAGGTACTTAAAGTGCTTTCCGAAGCTGCTATTTCAGCAAGTCTGGAAAAGTTTGAAATTCC
AGTAAAAATTCGTTTGAGTCCTGAACCGTGGACCCCTGAAACTGGTCTGGTGACAGATGCCTTCAAGCTG
AAACGCAAAGAGCTTAAAACACATTACCAGGCGGACATTGAGCGAATGTATGGAAGAAAATAA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004457 unedited
GTTATAAATTGTATACGACTCATATAGGGCGGCCGCGATTCGGCACGAGGGGACGGGGTC
GCATACGTTCGTCCCCTCGCATTGCGGCCCCGACAGCTGCGCCAGGATCCCCGGGCGGCG
GCGCGGGGCGTGAACGCTCTGGGGCTCAGCCAGGCCTGCGCGGGCCCGAGGCCGGAGGAA
CCCGGACTCCGGCGTAGCGGTTTTGACACAAGGGCGCATATCTTCAAAGCACCTAGTACC
TCCTACCATTGTCAACTGATTCTCGCTGAAGTCTGTTAATTCTACTTTNTTGGAGTACTT
ATGAATAACCACGTGTCTTCAAAACCATCTACCATGAAGCTAAAACATACCATCAACCCT
ATTCTTTTATATTTTATACATTTTCTAATATCACTTTATACTATTTTAACATACATTCCG
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AATTCAAAACCTGATTCTGCATACAGATCTGTTAATAGTTTGGATGGTTTGGCTTCAGTA
TTATACCCTGGATGTGATACTTTAGATAAAGTTTTTACATATGCAAAAAACAAATTTAAG
AACAAAAGACTCTTGGGAACACGTGAAGTTTTAAATGAGGAAGATGAAGTACAACCAAAT
GGAAAAATTTTTAAAAGGTTATTCTTGGACAGTATAATGGNCTNTCCTATGAAAGATGTC
TTGNTCGAGCCTTTAATTNNTGAAATGGATACAGATGTTGGGTCAGAAACAAAGACCACA
TCGNCATCTTCTGTGAGACCAGGCCGAGTGGATGATAGCTGCAAGGCCTGTTTTATGTAT
AAATTTCAGCTGGTACATAAATGGCACTCTAGGAGGTCCAGCCCATGTNATGCATTAAAT
GAAN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004457 unedited
GTGGATATGGGTATCTTTTATGNCTCTCAAAGCATACAAGCACATAATTACACAGCAACA
AATTTTTTGTTCAACAATGATTTGATTCATAAGCATTTGAAATTTACATAATTTCATATC
AATACCCTTGTATTTTTAAATACAGTAAGTAAAAAAGCCCCCAAATAACCAATTCTTATA
TTTCCTATTTATCCCTCTATACATCCAAACTTTTAAAAAGTTACAAACTGAACATTATAC
AGAACATATAAATCATGTTTAAAAACTTGAGGTTTTAAAATCACTGCTTCCCCAATATGA
TTCACAAAAATTCTCATACTGACAAGTACAGCCATAGGTGGTAAAGTAAGTTGGTGGCGG
GGAAAATGAAAGAAGACACAGACACAAGCCCGACTGCTTAATGGTTAACTAATCCTGCCA
GTTAAAAATGGTGACGCCCTGAGAAGCCACAGCCCACTACTTTTACTGGCCCCTGCCATG
CGCCTTGCTACATGCATTCCAAGTACTCCCCTATTCCATCTTGACCCTTTTCCCCACCCC
GCCGTTCCGTTTACAATTAACCCTTTCCTTTTATATATTCCCTCAACGCTCGCCCGCTTT
CCCGTTCCCTTCCTTCGCCTTCGTACTCCTTGATCCCCGTTACTTACTAATTTCCCCCGC
CCCCCCCCCTCCTATTTCACCAATCGTTCTCGGACCCCAACACTTCCCATATTTCGCAAA
TACAACCCCGGAACAAGTTGTCCTCTAATTCACCTATTACACCACTTTATACGCTCTTTT
ACCCCCCCTTCGCCTTCCGACACGCCTTTTATTTTTTTCCTCCGCACCACCTATCACACC
CTCTCCCGCCCGTGCCCGTTTCCCCCTCCCTAACCTTTCCCTCCCTCCACTATGTTTCCT
CCCCTCCGCATCACCACTTTCTTCCCTTTCCCCCCGCCGCATATACCCCCGCGCTAAACG
CTGCCCAC

Restriction Sites: NotI-NotI

ACCN: NM_004457

Insert Size: 3260 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_004457.3, NP_004448.2
RefSeq Size:	4369 bp
RefSeq ORF:	2163 bp
Locus ID:	2181
UniProt ID:	O95573
Cytogenetics:	2q36.1
Domains:	AMP-binding
Protein Families:	Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Fatty acid metabolism, Metabolic pathways, PPAR signaling pathway
Gene Summary:	The protein encoded by this gene is an isozyme of the 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 is highly expressed in brain, and preferentially utilizes myristate, arachidonate, and eicosapentaenoate as substrates. The amino acid sequence of this isozyme is 92% identical to that of rat homolog. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2 encode the same protein.