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Product datasheet for SC121567

ACSL5 (NM_203379) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACSL5 (NM_203379) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACSL5
Synonyms:	ACS2; ACS5; FACL5
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF within SC121567 sequence for NM_203379 edited (data generated by NextGen Sequencing)

ATGCTTTTTATCTTTAACTTTTTGTTTTCCCCACTTCCGACCCCGGCGTTGATCTGCATC
CTGACATTTGGAGCTGCCATCTTCTTGTGGCTGATCACCAGACCTCAACCCGTCTTACCT
CTTCTTGACCTGAACAATCAGTCTGTGGGAATTGAGGGAGGAGCACGGAAGGGGGTTTCC
CAGAAGAACAATGACCTAACAAGTTGCTGCTTCTCAGATGCCAAGACTATGTATGAGGTT
TTCCAAAGAGGACTCGCTGTGTCTGACAATGGGCCCTGCTTGGGATATAGAAAACCAAAC
CAGCCCTACAGATGGCTATCTTACAAACAGGTGTCTGATAGAGCAGAGTACCTGGGTTCC
TGTCTCTTGCATAAAGGTTATAAATCATCACCAGACCAGTTTGTCGGCATCTTTGCTCAG
AATAGGCCAGAGTGGATCATCTCCGAATTGGCTTGTTACACGTACTCTATGGTAGCTGTA
CCTCTGTATGACACCTTGGGACCAGAAGCCATCGTACATATTGTCAACAAGGCTGATATC
GCCATGGTGATCTGTGACACACCCCAAAAGGCATTGGTGCTGATAGGGAATGTAGAGAAA
GGCTTCACCCCGAGCCTGAAGGTGATCATCCTTATGGACCCCTTTGATGATGACCTGAAG
CAAAGAGGGGAGAAGAGTGGAATTGAGATCTTATCCCTATATGATGCTGAGAACCTAGGC
AAAGAGCACTTCAGAAAACCTGTGCCTCCTAGCCCAGAAGACCTGAGCGTCATCTGCTTC
ACCAGTGGGACCACAGGTGACCCCAAAGGAGCCATGATAACCCATCAAAATATTGTTTCA
AATGCTGCTGCCTTTCTCAAATGTGTGGAGCATGCTTATGAGCCCACTCCTGATGATGTG
GCCATATCCTACCTCCCTCTGGCTCATATGTTTGAGAGGATTGTACAGGCTGTTGTGTAC
AGCTGTGGAGCCAGAGTTGGATTCTTCCAAGGGGATATTCGGTTGCTGGCTGACGACATG
AAGACTTTGAAGCCCACATTGTTTCCCGCGGTGCCTCGACTCCTTAACAGGATCTACGAT
AAGGTACAAAATGAGGCCAAGACACCCTTGAAGAAGTTCTTGTTGAAGCTGGCTGTTTCC
AGTAAATTCAAAGAGCTTCAAAAGGGTATCATCAGGCATGATAGTTTCTGGGACAAGCTC
ATCTTTGCAAAGATCCAGGACAGCCTGGGCGGAAGGGTTCGTGTAATTGTCACTGGAGCT
GCCCCCATGTCCACTTCAGTCATGACATTCTTCCGGGCAGCAATGGGATGTCAGGTGTAT
GAAGCTTATGGTCAAACAGAATGCACAGGTGGCTGTACATTTACATTACCTGGGGACTGG
ACATCAGGTCACGTTGGGGTGCCCCTGGCTTGCAATTACGTGAAGCTGGAAGATGTGGCT
GACATGAACTACTTTACAGTGAATAATGAAGGAGAGGTCTGCATCAAGGGTACAAACGTG
TTCAAAGGATACCTGAAGGACCCTGAGAAGACACAGGAAGCCCTGGACAGTGATGGCTGG
CTTCACACAGGAGACATTGGTCGCTGGCTCCCGAATGGAACTCTGAAGATCATCGACCGT
AAAAAGAACATTTTCAAGCTGGCCCAAGGAGAATACATTGCACCAGAGAAGATAGAAAAT
ATCTACAACAGGAGTCAACCAGTGTTACAAATTTTTGTACACGGGGAGAGCTTACGGTCA
TCCTTAGTAGGAGTGGTGGTTCCTGACACAGATGTACTTCCCTCATTTGCAGCCAAGCTT
GGGGTGAAGGGCTCCTTTGAGGAACTGTGCCAAAACCAAGTTGTAAGGGAAGCCATTTTA
GAAGACTTGCAGAAAATTGGGAAAGAAAGTGGCCTTAAAACTTTTGAACAGGTCAAAGCC
ATTTTTCTTCATCCAGAGCCATTTTCCATTGAAAATGGGCTCTTGACACCAACATTGAAA
GCAAAGCGAGGAGAGCTTTCCAAATACTTTCGGACCCAAATTGACAGCCTGTATGAGCAC
ATCCAGGATTAG

Clone variation with respect to NM_203379.1

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_203379 unedited
GCCCCCCGGGGGGGCCNNNNNCNNCNCNNNCCCNNCNNCCNCCCCCCGCCCGGTTCACAT
TTGTATACGACTCACTATAGGCGGCCGCGNAATTCGCACGAGGGAAAGATAGAAGTGCCT
NGATGTGGTGCNTGAATCAATACAGCCAGCTGTGAGGGGAGCACTTCCTGGACCCAGGAA
GGGAGAGTCTTCTTCCAGGTCTGAATTTCCTGCTGCTGTTCACAAAGATGCTTTTTATCT
TTAACTTTTTGTTTTCCCCACTTCCGACCCCGGCGTTGATCTGCATCCTGACATTTGGAG
CTGCCATCTTCTTGTGGCTGATCACCAGACCTCAACCCGTCTTACCTCTTCTTGACCTGA
ACAATCAGTCTGTGGGAATTGAGGGAGGAGCACGGAAGGGGGTTTCCCAGAAGAACAATG
ACCTAACAAGTTGCTGCTTCTCAGATGCCAAGACTATGTATGAGGTTTTCCAAAGAGGAC
TCGCTGTGTCTGACAATGGGCCCTGCTTGGGATATAGAAAACCAAACCAGCCCTACAGAT
GGCTATCTTACAAACAGGTGTCTGATAGAGCAGAGTACCTGNGTTCCTGTCTCTTGCATA
AAGGTTATAAATCATCACCAGACCAGTTTGTCGGCATCTTTGCTCAGAATAGGCCAGAGT
GGATCATCTCCGAATTGGCTTGTTACACGTACTCTATGGTAGCTGTACCTCTGTATGACA
CCTTGGGACCAGAAGCCATCGTACATATTGTCAACAAGGCTGATATCGCCATGGGTGATC
TGTGACACACCCCAAAAGGCATTGGTGCTGATAGGGAATGTANAGAAAGGCTTCCCCCCG
AGCTGAAAGTGATCATCCTTATGGACCCCCTTGATGATGACCTGAAAGCAAGAGGGGGAG
AAGATGGAAATTGAGATCTTATCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_203379 unedited
NATGGGGTGGCACTTCCAGGNCCAGGNANGAGCACTGGGGNAGGGTCACAGGGATGCCAC
CCGGGATCTGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTT
TTTTTTTTTTTTTTAAGTATCTGTAATAGTTTATTTTAAAGACTTTACATTTACAAGTAG
AAACAACATGTGTTATCTGTGGGTAAGGTAGAGCAGGAACTCTAATCCAAGGGTGGGGGA
GATCAGTTGGTTCCTTCACAGAAAATAAGCCTGTTGTGTGGGCATCTTGCTTGCCTGTAG
ATCTTTGTTCCCAGTTCAGGAGGTTTTTATTCAGTGCTTGCTTCATTTACTGGAAAAGTT
CACTGGGCCCACCTGTCAACTCCTTCCCCCACAGCTTCCAGCTCAGCAGCAAACTGTAGG
GAACAGATTTACTCCCCAGTTCCTACTGTAAATAATGCTTTAAGAACAGCATTCCTTTTG
GACAATATGTCATAGACCCAATTTTTAATACTCCCAAGTCAGATATCTAACTAGAGAGTT
TAGGAAATGTTTGGTATGATCAAACTTTTCCCTTCAGTACACAATTTAATTTACGCAGAA
NAGCCTCGGAGACATTTGTCTCATAGATATGATTGACATGAGTGATAGGCTAAAACTAAA
ATTTTAGTGGTTTGGGGAGTGGCCTAGAAACCTGAATTTGAACCACTTTTTTCAGAATTA
AAAAATCTCTTAATTTGAACCATGCAAAAAGTGAATTAGCCTACAAACCTTTTGGCAGGT
TTTGTTATTCCAGAAACAAAGAAAAAGGCACCGAAGGGTCCCCTTTGCACCCTATGCACT
TGTGGGTTCCCAACAANTATTAAGGGTGGGAAAGCCCGGAAGAAGGGCCGCCGCACATAA
ATCTGGTTTTCTGAGACACAGGTGA

Restriction Sites: NotI-NotI

ACCN: NM_203379

Insert Size: 2800 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_203379.1, NP_976313.1
RefSeq Size:	3233 bp
RefSeq ORF:	2052 bp
Locus ID:	51703
UniProt ID:	Q9ULC5
Cytogenetics:	10q25.2
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 uterus and spleen, and in trace amounts in normal brain, but has markedly increased levels in malignant gliomas. This gene functions in mediating fatty acid-induced glioma cell growth. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (2) differs in the 5' UTR and coding region compared to variant 1. This results in translation initiation from a downstream ATG and an isoform (b) that has a shorter N-terminus compared to isoform a. Both variants 2 and 3 encode isoform b.