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Product datasheet for SC111828

Acetyl CoA synthetase (ACSS2) (NM_018677) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acetyl CoA synthetase (ACSS2) (NM_018677) Human Untagged Clone
Tag:	Tag Free
Symbol:	Acetyl CoA synthetase
Synonyms:	ACAS2; ACECS; AceCS1; ACS; ACSA; dJ1161H23.1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene ORF within SC111828 sequence for NM_018677 edited (data generated by NextGen Sequencing)

ATGGGGCTTCCTGAGGAGCGGGTCCGGAGCGGCAGCGGGAGCCGGGGCCAGGAGGAAGCT
GGAGCCGGAGGCCGGGCGCGGAGTTGGTCTCCGCCGCCCGAGGTCAGCCGCTCCGCGCAC
GTCCCCTCGCTGCAGCGCTACCGCGAGCTGCACCGGCGCTCCGTGGAGGAGCCGCGGGAA
TTCTGGGGAGACATTGCCAAGGAATTTTACTGGAAGACTCCATGCCCTGGCCCATTCCTT
CGGTACAACTTTGATGTGACTAAAGGGAAAATCTTTATTGAGTGGATGAAAGGAGCAACT
ACCAACATCTGCTACAATGTACTGGATCGAAATGTCCATGAGAAAAAGCTTGGAGATAAA
GTTGCTTTTTACTGGGAGGGCAATGAGCCAGGGGAGACCACTCAGATCACATACCATCAG
CTTCTGGTCCAAGTGTGTCAGTTCAGCAATGTTCTCCGAAAACAGGGCATTCAGAAGGGG
GACCGAGTGGCCATCTACATGCCTATGATCCCAGAGCTTGTGGTGGCCATGCTGGCATGT
GCCCGCATTGGGGCTTTGCACTCCATTGTGTTTGCAGGCTTCTCTTCAGAGTCTCTATGT
GAACGGATCTTGGATTCCAGCTGCAGTCTTCTCATCACTACAGATGCCTTCTACAGGGGG
GAAAAGCTTGTGAACCTGAAGGAGCTGGCTGACGAGGCCCTGCAGAAGTGTCAGGAGAAG
GGTTTCCCAGTAAGATGCTGCATTGTGGTCAAGCACCTGGGGCGGGCAGAGCTCGGCATG
GGTGACTCCACCAGCCAGTCCCCCCCAATTAAGAGGTCATGCCCAGATGTGCAGATCTCA
TGTAACCAAGGGATTGACTTGTGGTGGCATGAGCTCATGCAAGAGGCAGGGGATGAGTGT
GAGCCCGAGTGGTGTGATGCCGAGGACCCACTCTTCATCCTGTACACCAGTGGCTCCACA
GGCAAACCCAAGGGTGTGGTTCACACAGTTGGGGGCTACATGCTCTATGTAGCCACAACC
TTCAAGTATGTGTTTGACTTCCATGCAGAGGATGTGTTCTGGTGCACGGCAGACATTGGT
TGGATCACTGGTCATTCCTACGTCACCTATGGGCCACTGGCCAATGGTGCCACCAGTGTT
TTGTTTGAGGGGATTCCCACATATCCGGACGTGAACCGCCTGTGGAGCATTGTGGACAAA
TACAAGGTGACCAAGTTCTACACAGCACCCACAGCCATCCGTCTGCTCATGAAGTTTGGA
GATGAGCCTGTCACCAAGCATAGCCGGGCATCCTTGCAGGTGTTAGGCACAGTGGGTGAA
CCCATCAACCCTGAGGCCTGGCTATGGTACCACCGGGTGGTAGGTGCCCAGCGCTGCCCC
ATCGTGGACACCTTCTGGCAAACAGAGACAGGTGGCCACATGTTGACTCCCCTTCCTGGT
GCCACACCCATGAAACCCGGTTCTGCTACTTTCCCATTCTTTGGTGTAGCTCCTGCAATC
CTGAATGAGTCCGGGGAAGAGTTGGAAGGTGAAGCTGAAGGTTATCTGGTGTTCAAGCAG
CCCTGGCCAGGGATCATGCGCACAGTCTATGGGAACCACGAACGCTTTGAGACAACCTAC
TTTAAGAAGTTTCCTGGATACTATGTTACAGGAGATGGCTGCCAGCGGGACCAGGATGGC
TATTACTGGATCACTGGCAGGATTGATGACATGCTCAATGTATCTGGACACCTGCTGAGT
ACAGCAGAGGTGGAGTCAGCACTTGTGGAACATGAGGCTGTTGCAGAGGCAGCTGTGGTG
GGCCACCCTCATCCTGTGAAGGGTGAATGCCTCTACTGCTTTGTCACCTTGTGTGATGGC
CACACCTTCAGCCCCAAGCTCACCGAGGAGCTCAAGAAGCAGATTAGAGAAAAGATTGGC
CCCATTGCCACACCAGACTACATCCAGAATGCACCTGGCTTGCCTAAAACCCGCTCAGGG
AAAATCATGAGGCGAGTGCTTCGGAAGATTGCTCAGAATGACCATGACCTCGGGGACATG
TCTACTGTGGCTGACCCATCTGTCATCAGTCACCTCTTCAGCCACCGCTGCCTGACCATC
CAGTGA

Clone variation with respect to NM_018677.3
276 c=>t;843 g=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_018677 unedited
TTTTCAAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCCGCG
ACCGCAAAGGCGGCCGCGGTTCTAGGAACTTGACGTGATGGGGCTTCCTGAGGAGCGGGT
CCGGAGCGGCAGCGGGAGCCGGGGCCAGGAGGAAGCTGGAGCCGGAGGCCGGGCGCGGAG
TTGGTCTCCGCCGCCCGAGGTCAGCCGCTCCGCGCACGTCCCCTCGCTGCAGCGCTACCG
CGAGCTGCACCGGCGCTCCGTGGAGGAGCCGCGGGAATTCTGGGGAGACATTGCCAAGGA
ATTTTACTGGAAGACTCCATGCCCTGGCCCATTCCTTCGGTACAACTTTGATGTGACTAA
AGGGAAAATCTTTATTGAGTGGATGAAAGGAGCAACTACCAACATCTGCTACAATGTACT
GGATCGAAATGTCCATGAGAAAAAGCTTGGAGATAAAGTTGCTTTTTACTGGGAGGGCAA
TGAGCCAGGGGAGACCACTCAGATCACATACCATCAGCTTCTGGTCCAAGTGTGTCAGTT
CAGCAATGTTCTCCGAAAACAGGGCATTCAGAAGGGGGACCGAGTGGCCATCTACATGCC
TATGATCCCAGAGCTTGTGGTGGCCATGCTGGCATGTGCCCGCATTGNGGCTNTGCACTC
CATTGTGTNTGCAGGCTTCTCTTCAGAGTCTCTATGTGAACGGATCTTGGATTTCAGCTG
CAGTCTTCTCATCACTACAGATGCCTTCTACAGGGGGGAAAAAGCTTGTGAACCCTTGAA
GAGCTTGCCTGACGAGGCCCCTGCAANAAGTGTCAGGAGAAAGGGGTTTCCATTAAGATG
CTGCATTGTGGTCAAGCACCTGTGGCGGGNCANAGCTTGGCAATGGNTGACTNCACCAGC
CAGTCCCCCCCAATTAANAGTCATGCCCCAATGTGCAGATCTCATGT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_018677 unedited
GCAAACGAGGACGTCGCCCCAATCTANGTCAGTTTTAATTCCTTTTTTTTGAGATCCAGG
CTTTATTCCTACAACCACAGGCTTGAGCCTGACTGGGGCAAGAAAACAGAGTTTCATCTG
AGAATGTCTCTTATGGGCTGGGTTCTGTTCAGGGGAGGGTGGGAACAGAGGACAAGGAAG
ACAAGCTCCTCTGGCCCTAGGAACAAAACACATTTACTCCTTCAAAGAAGCAGATGATCT
GAATACCCTCTGGAGACTGAATCTGCCCATACAGCCCCTGGAGCCAATGGGCAGACAGTA
CTGGCATCTGGCACAAAAGGGAATTCAGACCCAGAACAGAAGCAGCAAAATATTTTAAAA
ATAGTAAATTGTTCCTGGACTCACAAATCATTGTTTTTAAAGGCAAGTGCATGCCCAATA
TAAGTACTGGGGCTTCCTAAGAGAGCTGACATAGGATTACACAGCTGCCTCCCTGCTTCA
GTGGAGGCCCTCACATCCCCTTTGAACACTTAACTTGGGTAGGAGAGGTAGCCTTTTCGT
CTCTGTTCTGGGTTCTGAGAGCTCTGCAGTCTGGAGGCACAGCAGACTGAAGCTGACCTG
NGCCCTGTCCTTTCTGCCTGGCAGTCACAGGATGTTGTCTCTACCTGGAGACAAAGCTGG
TTTCCGGTCCCAGACAGCTGGTCAAGGGAAGGTAGTGTGGGGTCAACACTGGCCCCTCAG
CACTCCTGGAGGGGGCAAAGAGGATGGGACAAAGTTTTGGAGCAGGAAGGATCCTAAGTA
AAGGTCAAGATCATGTTCACTGGATGGTCAGGCACCGGTGGCTGAAAAGGTGACTGATGA
CAGATGGGTCACCCCCATAAAATGTTCCCGAAGTATGGGCA

Restriction Sites: NotI-NotI

ACCN: NM_018677

Insert Size: 3000 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_018677.2, NP_061147.1
RefSeq Size:	2925 bp
RefSeq ORF:	2106 bp
Locus ID:	55902
UniProt ID:	Q9NR19
Cytogenetics:	20q11.22
Domains:	AMP-binding
Protein Pathways:	Glycolysis / Gluconeogenesis, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism
Gene Summary:	This gene encodes a cytosolic enzyme that catalyzes the activation of acetate for use in lipid synthesis and energy generation. The protein acts as a monomer and produces acetyl-CoA from acetate in a reaction that requires ATP. Expression of this gene is regulated by sterol regulatory element-binding proteins, transcription factors that activate genes required for the synthesis of cholesterol and unsaturated fatty acids. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009] Transcript Variant: This variant (1) encodes the predominant isoform (1).