OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC321668

ACADSB (NM_001609) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADSB (NM_001609) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACADSB
Synonyms:	2-MEBCAD; ACAD7; SBCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for NM_001609.3
CCTGCGGCGAGGATGGAGGGCCTGGCAGTGCGGTTGCTGCGCGGCAGCAAGCTGCTAAGA
AGAAATTTCCTGACTTGTTTGTCTTCTTGGAAGATTCCTCCTCATGTCTCAAAATCTTCC
CAGTCAGAAGCTCTACTCAATATAACAAATAATGGAATACACTTTGCTCCCCTGCAAACA
TTTACAGATGAGGAAATGATGATAAAGAGTTCAGTTAAAAAATTTGCTCAGGAACAAATT
GCACCTTTGGTTTCAACCATGGATGAAAATTCGAAAATGGAGAAATCAGTAATACAAGGA
TTATTTCAACAAGGGTTGATGGGTATTGAAGTTGACCCAGAATATGGAGGCACAGGAGCT
TCATTTTTATCCACTGTGCTCGTGATAGAGGAATTAGCCAAAGTTGATGCATCTGTGGCT
GTCTTTTGTGAGATCCAGAACACATTAATTAACACACTGATTAGAAAACATGGAACAGAA
GAACAAAAGGCCACCTATTTGCCTCAGCTCACTACAGAAAAAGTAGGAAGTTTCTGCCTT
TCAGAGGCTGGAGCAGGTAGTGACTCATTTGCTTTGAAGACCAGAGCTGATAAAGAGGGA
GATTATTATGTCCTCAATGGATCAAAGATGTGGATCAGCAGTGCTGAGCACGCAGGGCTC
TTTCTGGTGATGGCAAATGTAGACCCTACCATTGGATATAAGGGAATTACCTCCTTCTTA
GTAGATCGTGATACTCCGGGCCTTCATATAGGGAAACCTGAAAACAAATTGGGGCTCAGA
GCTTCTTCCACCTGCCCGTTAACATTCGAAAATGTCAAGGTTCCAGAAGCCAATATCTTG
GGACAAATTGGACATGGCTATAAGTATGCCATAGGGAGTCTCAATGAAGGTAGAATAGGA
ATTGCTGCACAGATGCTGGGACTGGCGCAAGGATGTTTTGACTACACTATTCCATATATT
AAAGAAAGGATACAATTTGGCAAAAGACTATTTGATTTTCAGGGCCTCCAACACCAAGTG
GCTCACGTGGCCACCCAGCTGGAAGCTGCAAGATTACTAACATACAATGCTGCTAGGCTT
TTAGAAGCTGGAAAGCCATTCATAAAAGAAGCGTCAATGGCCAAATACTATGCATCAGAG
ATTGCAGGACAAACAACGAGTAAATGTATCGAGTGGATGGGGGGAGTAGGCTACACCAAA
GATTACCCTGTGGAGAAATACTTCCGAGATGCAAAGATTGGTACGATATATGAAGGAGCT
TCCAACATCCAGTTGAACACCATTGCAAAGCATATCGATGCAGAATACTGACGTCTATAG
GAGTGGGACCCCTCCCTGGTGTCACTGCTGTAAAATTTTAAACGGTTGTGTCTTGTTGGG
AGTAAGTGCCTTGCGTGGGAATAAACTTCCACAGCATTCGAATATTTTAATGAAGCCCTT
AGTCAGGGTCCTGGTGTTGGCCTTTTTGGTTTTCTCTTTTCAGGCTGTTTAACTTAGGCA
CAGGAGATCCACTTTTAAACTTGGGAAATAAGCACCTGTATTTTTTTCCAAAACTGTTTT
TAAAGCTGTATACGCATACATATATATATTTTTACTCTGTCTTACTCTGTCACCCAGGCT
AGAGTGCAGTGGCGCGATCTCAGCTCACTGCAGCCTTGACCTCCTGGGTTCCAGTGATTC
TCATGCCTCATCCTCCCAAGTAGCTGGAACTACAGGTGTGCACCACCATGCCTGGTTCAT
TTTTGTGTTTTTAGTAGAGATGGGGTTTTACCATATTGCCCAGGCTGGTCTTCTGGCTTC
TGGATATCGCCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGGATGAGCCACCGTGCC
TGGCTGGGTATTTATATTATCATTCTAGTTTCAGAGTATACAGAAGTTTCATCCCATCAT
TTGGAAAAATAAAGGCATCTGAAGTACAATATTACTTATAGAAATAGTTTATATTCCTAT
TAAATCTTAATCTTGTGGCATCAGGGAAATATTTGTTACATAGTAGGCAATTTTTATCCA
GTACTTTATAGATTCAACTCTAAGTTGCAAGCGAAGTCAAAACTGATGAAAATTTATTTA
GAAAAATCTAAAAATTCTGGTTTTAAATATGAGAATCAGTGGAAAATAAGGGTATAATTT
TGTAGGTCATATGATTGAAGAAAATATTATTTTAACAATGTAAAGCAATATGATTTGTTA
CTATAATTAACCTGTATAAAAGATACATTTTATGGTGGTTTCAGTAGGTCATTTTAAAAA
CCAATGTGCATTAGTTTTCAAGTATAAGGTTTAAGTAATTTGGTTTAATAATCAGAAAAT
ATTCAATACAGTGTTGGATATTCTGTCATGCACTATTTTTCAGTTGAAAAAAAAAAAAAA
A

Restriction Sites: Please inquire

ACCN: NM_001609

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_001609.3, NP_001600.1
RefSeq Size:	5941 bp
RefSeq ORF:	1299 bp
Locus ID:	36
UniProt ID:	P45954
Cytogenetics:	10q26.13
Domains:	Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N
Protein Pathways:	Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation
Gene Summary:	Short/branched chain acyl-CoA dehydrogenase(ACADSB) is a member of the acyl-CoA dehydrogenase family of enzymes that catalyze the dehydrogenation of acyl-CoA derivatives in the metabolism of fatty acids or branch chained amino acids. Substrate specificity is the primary characteristic used to define members of this gene family. The ACADSB gene product has the greatest activity towards the short branched chain acyl-CoA derivative, (S)-2-methylbutyryl-CoA, but also reacts significantly with other 2-methyl branched chain substrates and with short straight chain acyl-CoAs. The cDNA encodes for a mitochondrial precursor protein which is cleaved upon mitochondrial import and predicted to yield a mature peptide of approximately 43.7-KDa. [provided by RefSeq, Jul 2008]