

Product datasheet for RC238026

ACADS (NM_001302554) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ACADS (NM_001302554) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ACADS
Synonyms: ACAD3; SCAD
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC238026 representing NM_001302554
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCGCGCTGCTCGCCGGGCTCGGGCCCTGCCCGCAGAGCTCTGTCTAGGGCCTGGCGGC
AGTTACACACCCTACCAGTCTGTGAACTGCCCGAGACACACCAGATGTTGCTCCAGACATGCCGGGA
CTTTGCCGAGAAGGAGTTGTTCCATTGACGCCAGGTGGATAAGGAACATCTTCCAGCGGCTCAG
GTGAAGAAGATGGCGGGCTTGGGCTTCTGGCCATGGACGTGCCCGAGGAGCTTGGCGGTGCTGGCCTCG
ATTACCTGGCCTACGCCATCGCCATGGAGGAGATCAGCCGTGGCTGCGCCTCCACCGGAGTCATCATGAG
TGTCAACAACCTCTCTACCTGGGGCCATCTTGAAGTTTGGCTCCAAGGAGCAGAAGCAGGCGTGGGTC
ACGCCCTTACCAGTGGTGACAAAATTGGCTGCTTGGCCTCAGCGAACCAGGGCCTTCTCTCTTGGCC
CGACTGGACCTATTTTGGCTCTGGGGCAAGTGGGCTGTCCCTGTCCCTCCTCAGCTGCCACTGAAGCCTG
CACCTTCCCAGAAGCCGGCAGAGGGTGTCAAGGCTGAGCTTCTGAGGGAGGGCATCAGTGCCTTCTG
GTCCCCATGCCAACGCCCTGGGCTCACGTTGGGGAAGAAAGAACAAGCTGGGCATCCGGGGCTCATCCA
CGGCCAACCTCATCTTTGAGGACTGTGCATCCCCAAGGACAGCATCTGGGGAGCCAGGGATGGGCTT
CAAGATAGCCATGCAAACCTGGACATGGGCCGATCGGCATCGCCTCCCAGGCCCTGGCATTGCCAG
ACCGCCCTCGATTGTGCTGTGAACCTACGCTGAGAATCGCATGGCCTTCCGGGGCGCCCTCACCAAGCTCC
AGGTATCCAGTTCAAGTTGGCAGACATGGCCCTGGCCTGGAGAGTGCCCGGCTGCTGACCTGGCGCGC
TGCCATGCTGAAGGATAACAAGAAGCCTTTCATCAAGGAGGCAGCCATGGCCAAGCTGGCCGCTCGGAG
GCCGCGACCGCCATCAGCCACCAGGCCATCCAGATCCTGGCGGCATGGGCTACGTGACAGAGATGCCGG
CAGAGCGGCACTACCGCGACGCCCGCATCACTGAGATCTACGAGGGCACCAGCGAAATCCAGCGGCTGGT
GATCGCCGGGCATCTGCTCAGGAGCTACCGGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC238026 representing NM_001302554
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MAAALLARASGPARRALCPRAWRLHTIYQSVLPETHQMLLQTCRDFAEKELFPIAAQVDKEHLFPAAQ
 VKKMGGGLLLAMDVPEELGGAGLDYLAYAIAMEEISRGCASTGVIMSVNNSLYLGPILKFGSKEQKQAWV
 TPFTSGDKIGCFALSEPGPSLLGPTGPIFALGQVGCPCPSSAATEACTFPRSRQRVSRPELLREGISAF
 VPMPPTGLTLGKKEDKLGIRGSSTANLIFEDCRIPKDSILGEPGMGFKIAMQTLDMGRIGIASQALGIAQ
 TALDCAVNYAENRMAFGAPLTKLQVIQFKLADMALALESARLLTWRAAMLKDNKKPFIKEAAMAKLAASE
 AATAISHQAIQILGGMGYVTEMPAERHYRDARITEIYEGTSEIQRLVIAGHLLRSYRS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

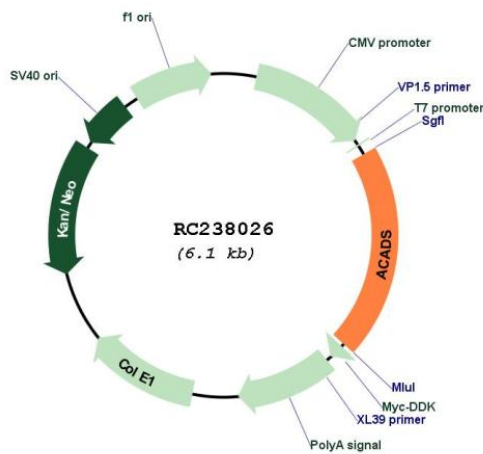
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001302554

ORF Size:	1224 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	<ol style="list-style-type: none">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_001302554.2
RefSeq Size:	1952 bp
RefSeq ORF:	1227 bp
Locus ID:	35
UniProt ID:	P16219
Cytogenetics:	12q24.31
Protein Families:	Druggable Genome
Protein Pathways:	Butanoate metabolism, Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation
MW:	44.5 kDa
Gene Summary:	This gene encodes a tetrameric mitochondrial flavoprotein, which is a member of the acyl-CoA dehydrogenase family. This enzyme catalyzes the initial step of the mitochondrial fatty acid beta-oxidation pathway. Mutations in this gene have been associated with short-chain acyl-CoA dehydrogenase (SCAD) deficiency. Alternative splicing results in two variants which encode different isoforms. [provided by RefSeq, Oct 2014]