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 RG206855

ACADS (NM_000017) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACADS (NM_000017) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACADS
Synonyms:	ACAD3; SCAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG206855 representing NM_000017
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCCGCGCTGCTCGCCCGGGCCTCGGGCCCTGCCCGCAGAGCTCTCTGTCCTAGGGCCTGGCGGC
AGTTACACACCATCTACCAGTCTGTGGAACTGCCCGAGACACACCAGATGTTGCTCCAGACATGCCGGGA
CTTTGCCGAGAAGGAGTTGTTTCCCATTGCAGCCCAGGTGGATAAGGAACATCTCTTCCCAGCGGCTCAG
GTGAAGAAGATGGGCGGGCTTGGGCTTCTGGCCATGGACGTGCCCGAGGAGCTTGGCGGTGCTGGCCTCG
ATTACCTGGCCTACGCCATCGCCATGGAGGAGATCAGCCGCGGCTGCGCCTCCACCGGAGTCATCATGAG
TGTCAACAACTCTCTCTACCTGGGGCCCATCTTGAAGTTTGGCTCCAAGGAGCAGAAGCAGGCGTGGGTC
ACGCCTTTCACCAGTGGTGACAAAATTGGCTGCTTTGCCCTCAGCGAACCAGGGAACGGCAGTGATGCAG
GAGCTGCGTCCACCACCGCCCGGGCCGAGGGCGACTCATGGGTTCTGAATGGAACCAAAGCCTGGATCAC
CAATGCCTGGGAGGCTTCGGCTGCCGTGGTCTTTGCCAGCACGGACAGAGCCCTGCAAAACAAGAGCATC
AGTGCCTTCCTGGTCCCCATGCCAACGCCTGGGCTCACGTTGGGGAAGAAAGAAGACAAGCTGGGCATCC
GGGGCTCATCCACGGCCAACCTCATCTTTGAGGACTGTCGCATCCCCAAGGACAGCATCCTGGGGGAGCC
AGGGATGGGCTTCAAGATAGCCATGCAAACCCTGGACATGGGCCGCATCGGCATCGCCTCCCAGGCCCTG
GGCATTGCCCAGACCGCCCTCGATTGTGCTGTGAACTACGCTGAGAATCGCATGGCCTTCGGGGCGCCCC
TCACCAAGCTCCAGGTCATCCAGTTCAAGTTGGCAGACATGGCCCTGGCCCTGGAGAGTGCCCGGCTGCT
GACCTGGCGTGCTGCCATGCTGAAGGATAACAAGAAGCCTTTCATCAAGGAGGCAGCCATGGCCAAGCTG
GCCGCCTCGGAGGCCGCGACCGCCATCAGCCACCAGGCCATCCAGATCCTGGGCGGCATGGGCTACGTGA
CAGAGATGCCGGCAGAGCGGCACTACCGCGACGCCCGCATCACTGAGATCTACGAGGGCACCAGCGAAAT
CCAGCGGCTGGTGATCGCCGGGCATCTGCTCAGGAGCTACCGGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

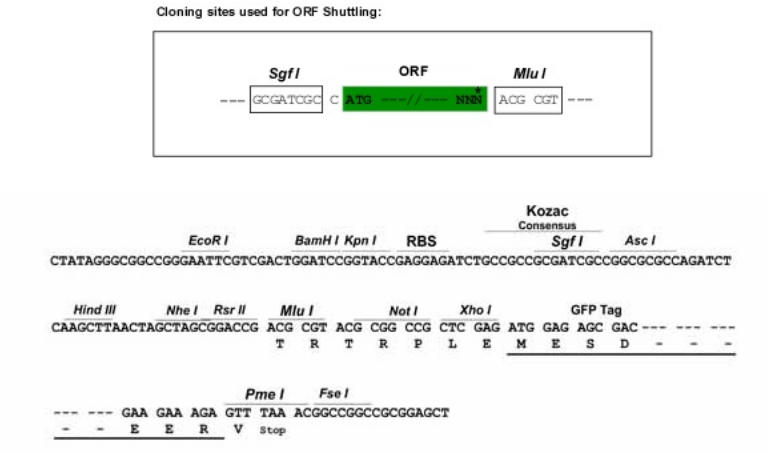
>RG206855 representing NM_000017
Red=Cloning site Green=Tags(s)

MAAALLARASGPARRALCPRAWRQLHTIYQSVELPETHQMLLQTCRDFAEKELFPIAAQVDKEHLFPAAQ
VKKMGGLGLLAMDVPEELGGAGLDYLAYAIAMEEISRGCASTGVIMSVNNSLYLGPILKFGSKEQKQAWV
TPFTSGDKIGCFALSEPGNGSDAGAASTTARAEGDSWVLNGTKAWITNAWEASAAVVFASTDRALQNKSI
SAFLVPMPTPGLTLGKKEDKLGIRGSSTANLIFEDCRIPKDSILGEPGMGFKIAMQTLDMGRIGIASQAL
GIAQTALDCAVNYAENRMAFGAPLTKLQVIQFKLADMALALESARLLTWRAAMLKDNKKPFIKEAAMAKL
AASEAATAISHQAIQILGGMGYVTEMPAERHYRDARITEIYEGTSEIQRLVIAGHLLRSYRS

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000017

ORF Size: 1236 bp

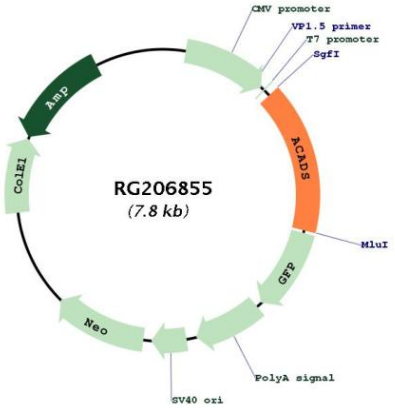
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	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_000017.1, NP_000008.1
RefSeq Size:	1829 bp
RefSeq ORF:	1239 bp
Locus ID:	35
UniProt ID:	P16219
Cytogenetics:	12q24.31
Domains:	Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N
Protein Families:	Druggable Genome
Protein Pathways:	Butanoate metabolism, Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation
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]

Product images:



Circular map for RG206855