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Product datasheet for RC203235

ACAD9 (NM_014049) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACAD9 (NM_014049) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACAD9
Synonyms:	MC1DN20; NPD002
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC203235 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCGGCTGCGGGCTCTTCCTGCGCACCACGGCTGCGGCTCGTGCCTGCCGGGGTCTGGTGGTCTCTA
CCGCGAACCGGCGGCTACTGCGCACCAGCCCGCCTGTACGAGCTTTCGCCAAAGAGCTTTTCCTAGGCAA
AATCAAGAAGAAAGAAGTTTTCCCATTTCCAGAAGTTAGCCAAGATGAACTTAATGAAATCAATCAGTTC
TTGGGACCCGTGGAAAAATTCTTCACTGAAGAGGTGGACTCCCGAAAAATTGACCAGGAAGGGAAAATCC
CAGATGAAACTTTGGAGAAATTGAAGAGCCTAGGGCTTTTTGGGCTGCAAGTCCCAGAAGAATATGGTGG
CCTGGGCTTCTCCAACACCATGTACTCACGACTAGGGGAGATCATCAGCATGGATGGGTCCATCACTGTG
ACCCTGGCAGCGCACCAGGCTATTGGCCTCAAGGGGATCATCTTGGCTGGCACTGAGGAGCAGAAAGCCA
AATACTTGCCTAAACTGGCGTCCGGGGAGCACATTGCAGCCTTCTGCCTCACGGAGCCAGCCAGTGGGAG
CGATGCAGCCTCAATCCGGAGCAGAGCCACACTAAGTGAAGACAAGAAGCACTACATCCTCAATGGCTCC
AAGGTCTGGATTACTAATGGAGGACTGGCCAATATTTTTACTGTGTTTGCAAAGACTGAGGTCGTTGATT
CTGATGGATCAGTGAAAGACAAAATCACAGCATTCATAGTAGAAAGAGACTTTGGTGGAGTCACTAATGG
GAAACCCGAAGATAAATTAGGCATTCGGGGCTCCAACACTTGTGAAGTCCATTTTGAAAACACCAAGATA
CCTGTGGAAAACATCCTTGGAGAGGTCGGAGATGGGTTTAAGGTGGCCATGAACATCCTCAACAGCGGCC
GGTTCAGCATGGGCAGCGTCGTGGCTGGGCTGCTCAAGAGATTGATTGAAATGACTGCTGAGTACGCCTG
CACAAGGAAACAGTTTAACAAGAGGCTCAGTGAATTTGGATTGATTCAGGAGAAATTTGCACTGATGGCT
CAGAAGGCTTACGTCATGGAGAGTATGACCTACCTCACAGCAGGGATGCTGGACCAACCTGGCTTTCCCG
ACTGCTCCATCGAGGCAGCCATGGTGAAGGTGTTCAGCTCCGAGGCCGCCTGGCAGTGTGTGAGTGAGGC
GCTGCAGATCCTCGGGGGCTTGGGCTACACAAGGGACTATCCGTACGAGCGCATACTGCGTGACACCCGC
ATCCTCCTCATCTTCGAGGGAACCAATGAGATTCTCCGGATGTACATCGCCCTGACGGGTCTGCAGCATG
CCGGCCGCATCCTGACTACCAGGATCCATGAGCTTAAACAGGCCAAAGTGAGCACAGTCATGGATACCGT
TGGCCGGAGGCTTCGGGACTCCCTGGGCCGAACTGTGGACCTGGGGCTGACAGGCAACCATGGAGTTGTG
CACCCTAGTCTTGCGGACAGTGCCAACAAGTTTGAGGAGAACACCTACTGCTTCGGCCGGACCGTGGAGA
CACTGCTGCTCCGCTTTGGCAAGACCATCATGGAGGAGCAGCTGGTACTGAAGCGGGTGGCCAACATCCT
CATCAACCTGTATGGCATGACGGCCGTGCTGTCGCGGGCCAGCCGCTCCATCCGCATTGGGCTCCGCAAC
CACGACCACGAGGTTCTCTTGGCCAACACCTTCTGCGTGGAAGCTTACTTGCAGAATCTCTTCAGCCTCT
CTCAGCTGGACAAGTATGCTCCAGAAAACCTAGATGAGCAGATTAAGAAAGTGTCCCAGCAGATCCTTGA
GAAGCGAGCCTATATCTGTGCCCACCCTCTGGACAGGACATGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203235 protein sequence
Red=Cloning site Green=Tags(s)

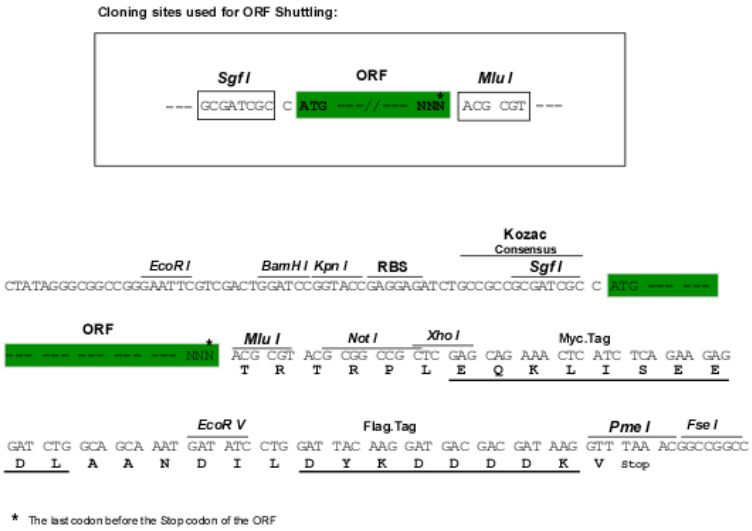
MSGCGLFLRTTAAARACRGLVVSTANRRLLRTSPPVRAFAKELFLGKIKKKEVFPFPEVSQDELNEINQF
LGPVEKFFTEEVDSRKIDQEGKIPDETLEKLKSLGLFGLQVPEEYGGLGFSNTMYSRLGEIISMDGSITV
TLAAHQAIGLKGIILAGTEEQKAKYLPKLASGEHIAAFCLTEPASGSDAASIRSRATLSEDKKHYILNGS
KVWITNGGLANIFTVFAKTEVVDSDGSVKDKITAFIVERDFGGVTNGKPEDKLGIRGSNTCEVHFENTKI
PVENILGEVGDGFKVAMNILNSGRFSMGSVVAGLLKRLIEMTAEYACTRKQFNKRLSEFGLIQEKFALMA
QKAYVMESMTYLTAGMLDQPGFPDCSIEAAMVKVFSSEAAWQCVSEALQILGGLGYTRDYPYERILRDTR
ILLIFEGTNEILRMYIALTGLQHAGRILTTRIHELKQAKVSTVMDTVGRRLRDSLGRTVDLGLTGNHGVV
HPSLADSANKFEENTYCFGRTVETLLLRFGKTIMEEQLVLKRVANILINLYGMTAVLSRASRSIRIGLRN
HDHEVLLANTFCVEAYLQNLFSLSQLDKYAPENLDEQIKKVSQQILEKRAYICAHPLDRTC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6152_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014049

ORF Size: 1863 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.

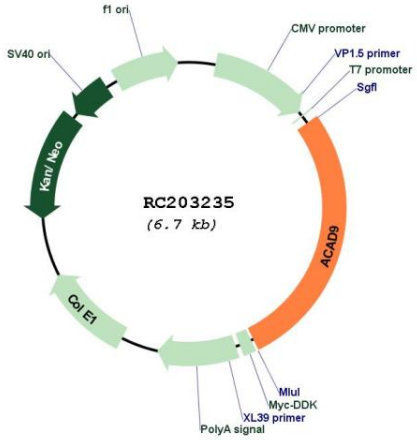
RefSeq: NM_014049.3, NP_054768.2

RefSeq Size: 2608 bp

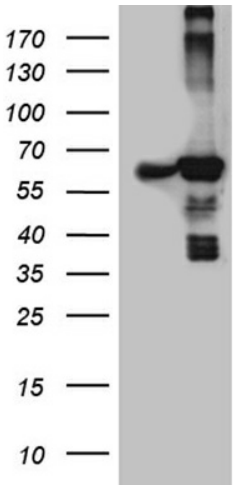
RefSeq ORF: 1866 bp

Locus ID:	28976
UniProt ID:	Q9H845
Cytogenetics:	3q21.3
Domains:	Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N
MW:	68.8 kDa
Gene Summary:	This gene encodes a member of the acyl-CoA dehydrogenase family. Members of this family of proteins localize to the mitochondria and catalyze the rate-limiting step in the beta-oxidation of fatty acyl-CoA. The encoded protein is specifically active toward palmitoyl-CoA and long-chain unsaturated substrates. Mutations in this gene cause acyl-CoA dehydrogenase family member type 9 deficiency. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Mar 2010]

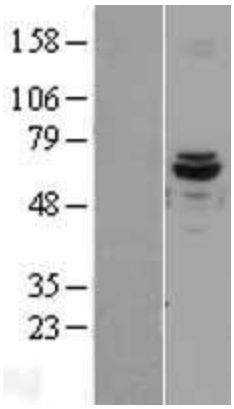
Product images:



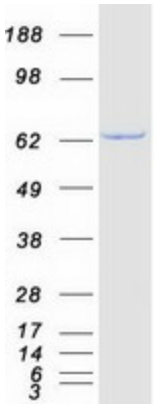
Circular map for RC203235



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACAD9 (Cat# RC203235, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACAD9 (Cat# [TA811802])(1:2000). Positive lysates [LY402280] (100ug) and [LC402280] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402280]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203235 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACAD9 protein (Cat# [TP303235]). The protein was produced from HEK293T cells transfected with ACAD9 cDNA clone (Cat# RC203235) using MegaTran 2.0 (Cat# [TT210002]).