

Product datasheet for **RR215382**

Acad9 (NM_181768) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acad9 (NM_181768) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acad9
Synonyms:	Nyggf2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR215382 representing NM_181768
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCGCTATGTACTGTTCTCGCGTGGGGCAGCTGCGCGGCAGCTGCGGCGGAGCTTCCCGGTGC
 TGAGGGTCTTACGAGAGGGCGCCGACATTGCACACCAGTCTGCAGAGCTGCTCGTTCGCCAAGGAGCT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

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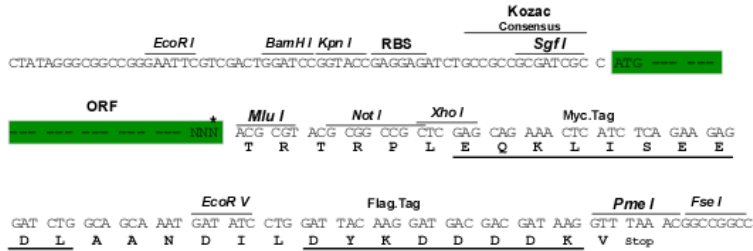
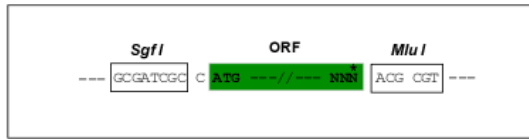
MSGYVLF SRGATAAAAAARSRVLRVFTERRRRLHTSLQSCSFAKELFLGHIQQKGVFPFPEVVSQEELSE
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 NTRVPPVENVLGEVGGFKVAMNINLSGRFSMGS AVAGMLKKLIEQTAEYACTRKQFNRLSEFGLIQEKF
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 RDARILLIFEGTNEILRLFIAL TGLQHAGRILTSRIKELKSGNVTVMETIGRKL RDSLGRVLDLGLSSN
 IAVVHPSL GDSANKLEENVHYFGRTVETLLLRFGKTIVEEQLVLRVANILINLYGMTAVLSRASRSIRI
 GLKNHDHEILLANMFCVEAYFQNLFSLSQLDKYAPENLDEQIKKVSQQILEKRAYICAHPLDRAS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

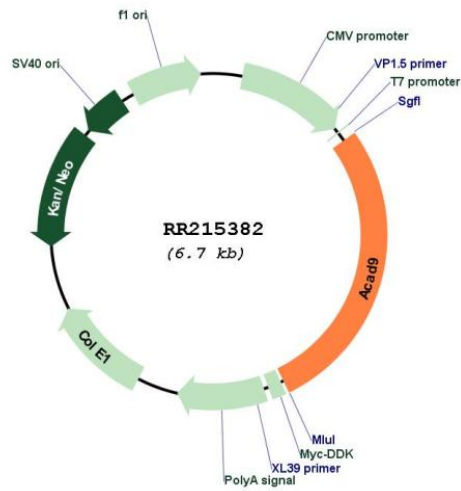
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_181768

ORF Size: 1875 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_181768.2 , NP_861433.2
RefSeq Size:	2471 bp
RefSeq ORF:	1878 bp
Locus ID:	294973
UniProt ID:	B1WC61
Cytogenetics:	2q25
MW:	68.8 kDa
Gene Summary:	As part of the MCI A complex, primarily participates to the assembly of the mitochondrial complex I and therefore plays a role in oxidative phosphorylation. This moonlighting protein has also a dehydrogenase activity toward a broad range of substrates with greater specificity for long-chain unsaturated acyl-CoAs. However, in vivo, it does not seem to play a primary role in fatty acid oxidation. In addition, the function in complex I assembly is independent of the dehydrogenase activity of the protein.[UniProtKB/Swiss-Prot Function]