

Product datasheet for MR219865

Acmsd (NM_001033041) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acmsd (NM_001033041) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Acmsd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR219865 representing NM_001033041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAATTGACATCCACTCATATTCTACCAAAGGAATGGCCCGATCTAGAAAAGAGTTTGGCTATG
GAGGCTGGGTGCAGCTCCAACAGCAAGGCAAGGGAGAAGCAAAGATGATAAAAGATGGGAAGCTCTTCAG
AGTGATCCAACAGAACTGCTGGGACCCAGAAGTTCGTATCAGAGAAATGAACCAGAAAGGAGTGACAGTC
CAAGCTCTTCCACAGTTCCTGTATGTTTAGCTACTGGGCCAAACCTAAGGATACTTTGGAGCTGTGCC
AGTTTTTAAACAATGACCTAGCTGCCACGTTGCCAGATACCCTCGAAGTTTGTGGTGGGGACGTT
GCCTATGCAAGCCCGGAGCTGGCCGTCGAGGAGATGGAGCGTTGTGTTAAGGCGTAGGATTTCCAGGA
ATCCAGATTGGCTCCACATCAACACATGGGACCTGAATGACCCGGAACCTCTCCAATCTATGCTGCGG
CCGAGAGGCTGAACTGTTCTCTGTTTCGTGCATCCCTGGGATATGCAGATGGATGGACGAATGGCCAAATA
CTGGCTGCCTTGGCTCGTAGGAATGCCATCGGAGACCACCATGGCCATTTGCTCCATGATCATGGGTGGG
GTGTTTGAGAAGTTTCCCAAACCAAAGTGTGCTTCGCACACGGAGGTGGTGTCTTCCCCTTACCATAG
GAAGAATTGCCCATGGATTCAACATGCGCCAGATCTCTGTGCCAGGACAATCCGTCGACCCAGAAA
ATACCTTGGCTCCTTCTACACAGACTCCCTGGTTCACGATCCTCTGTCTCTCAAGCTATTGACAGATGTC
ATAGGAAAGGATAAAGTCATGCTGGAACTGATTACCCCTTTCCTCTGGGCGAGCAGGAGCTGGGAAGC
TGATAGAGTCCATGGCAGAGTTTGATGAAGAAACAAAGGATAAACTTACAGCTGGCAATGCCTTGGCTTT
TTTGGTCTTGAGAGAAACTATTTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR219865 representing NM_001033041
Red=Cloning site Green=Tags(s)

MKIDITHILPKIEWPDLEKRFYGGWVQLQQQKGEAKMIKDGKLF RVIQQNCWDPEVRIEMNQKGVTV
 QALSTVPVMFSYWAKPKDTLELCQFLNNDLAATVARYPRRFVGLGTLPMQAPELAVEEMERCVKALGFPG
 IQIGSHINTWDLNDELFPFIYAAAERLNC SLFVHPWDMQMDGRMAKYWLPWLVGMPSETTMAICSMIMGG
 VFEKFPKLKVCFAHGGGAF PFTIGRIAHGFNMRPDLCAQDNPSDPRKYLGSFYTDSL VHDPLSLKLLTDV
 IGKDKVMLGTDYFPPLGEQEPGKLI ESMAEFDEETKDKLTAGNALAFLGLERKLF E

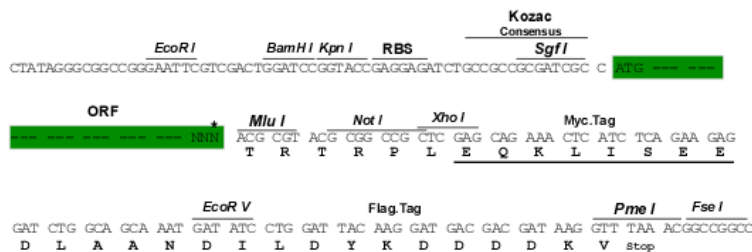
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9020_d04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001033041

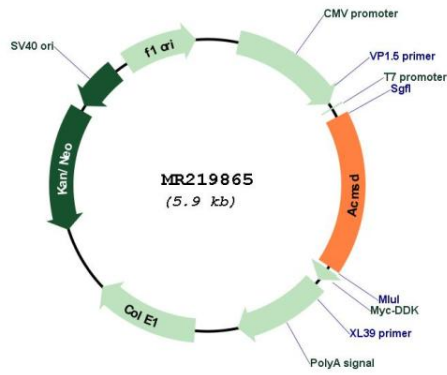
ORF Size: 1008 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<u>NM_001033041.2</u> , <u>NP_001028213.1</u>
RefSeq Size:	2303 bp
RefSeq ORF:	1011 bp
Locus ID:	266645
UniProt ID:	<u>Q8R519</u>
Cytogenetics:	1 E3
MW:	38.5 kDa
Gene Summary:	Converts alpha-amino-beta-carboxymuconate-epsilon-semialdehyde (ACMS) to alpha-aminomuconate semialdehyde (AMS). ACMS can be converted non-enzymatically to quinolate (QA), a key precursor of NAD, and a potent endogenous excitotoxin of neuronal cells which is implicated in the pathogenesis of various neurodegenerative disorders. In the presence of ACMSD, ACMS is converted to AMS, a benign catabolite. ACMSD ultimately controls the metabolic fate of tryptophan catabolism along the kynurenine pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219865