

Product datasheet for **RC210656**

ACMSD (NM_138326) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACMSD (NM_138326) Human 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:	>RC210656 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAATTGACATCCATAGTCATATTCTACCAAAGAATGGCCAGATCTAAAAAGAGGTTTGGCTACG
GAGGCTGGGTGCAGCTCCAACACCACAGCAAGGGAGAAGCAAAGTTGTTGAAAGATGGGAAAGTCTTCAG
AGTGGTGCAGAGAATTGCTGGGATCCAGAAGTTCGTATTAGAGAAATGGACAAAAGGAGTAACAGTG
CAAGCCCTTCCACAGTTCCTGTCATGTTTAGCTACTGGGCCAAACCTGAGGACACTTTAAACCTGTGCC
AGCTTTTAAACAACGACCTTGCCAGCACCGTTGTGAGCTACCCAGGAGTTTCGTGGTCTGGGACGTT
GCCATGCAGGCCCTGAGCTGGCGGTCAAGGAGATGGAGCGCTGTGTGAAAGAGCTGGGCTTCCCGGG
GTCCAAATTGGCACCCACGTCAACGAGTGGACCTGAACGCGCAGGAGCTCTTTCCTGTCTATGCGGCAG
CCGAAAGGCTGAAGTGTCCCTGTTTCGTGCATCCCTGGGACATGCAGATGGATGGACGAATGCCAAATA
CTGGCTCCCTGGCTTGTAGGAATGCCAGCAGAGACCACCATAGCCATTTGCTCCATGATCATGGGTGGA
GTATTTGAGAAGTTTCCCAAAGTAAAGTGTGTTTCGCACATGGTGGTGGTGCCTTCCCCTTACAGTGG
GAAGAATCTCCATGGATTCAGCATGCGCCAGATCTGTGTGCCAGGACAACCCATGAACCCGAAGAA
ATACCTTGGTTCCTTTACACAGATGCTTTGGTTCATGATCCTCTGTCCCTCAAGCTGTTAACAGATGTC
ATAGGAAAGGATAAAGTCATTTTGGGAACCGATTACCCCTTCCACTAGGTGAGCTGGAACCTGGGAAAC
TAATAGAGTCCATGGAAGAATTTGATGAAGAAACAAGAATAAACTCAAAGCCGGCAATGCCTGGCATT
TTTGGTCTTGAGAGAAAACAATTTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210656 protein sequence
Red=Cloning site Green=Tags(s)

MKIDISHILPKEWPDLLKRFYGGWVQLQHHSKGEAKLLKDGKVFVRENCWDPEVRIEMDQKGVTV
 QALSTVPVMFSYWAKPEDTLNLCQLLNNDLASTVVSYPVRRFVGLGTLPMQAPELAVKEMERCVKELGFPG
 VQIGTHVNEWDLNAQELFPVYAAAERLKCSLFVHPWDMQMDGRMAKYWLPWLVGMPAETTIAICSMIMGG
 VFEKFPKLVCF AHGGGAF PFTVGRISHGF SMRPDLCAQDNPMNPKKYLGSFYTDALVHDPLSLKLLTDV
 IGKDKVILGTDYFPPLGELEPGKLI ESMEEFDEETKNKLGAGNALAFLGLERKQFE

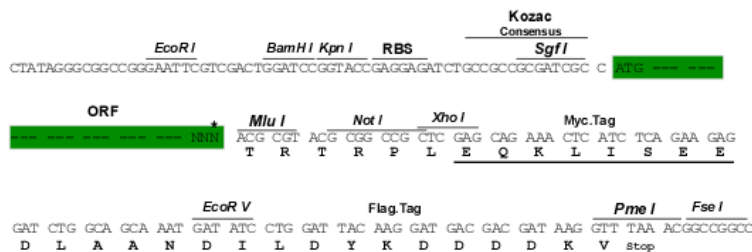
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6671_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_138326

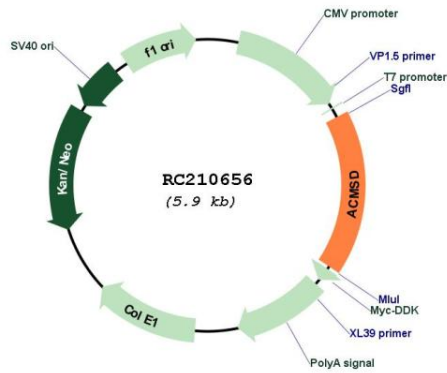
ORF Size: 1008 bp

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.

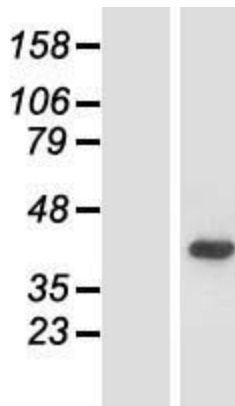
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	NM_138326.3
RefSeq Size:	1278 bp
RefSeq ORF:	1011 bp
Locus ID:	130013
UniProt ID:	Q8TDX5
Cytogenetics:	2q21.3
Protein Families:	Transmembrane
Protein Pathways:	Metabolic pathways, Tryptophan metabolism
MW:	38 kDa
Gene Summary:	The neuronal excitotoxin quinolinate is an intermediate in the de novo synthesis pathway of NAD from tryptophan, and has been implicated in the pathogenesis of several neurodegenerative disorders. Quinolinate is derived from alpha-amino-beta-carboxy-muconate-epsilon-semialdehyde (ACMS). ACMSD (ACMS decarboxylase; EC 4.1.1.45) can divert ACMS to a benign catabolite and thus prevent the accumulation of quinolinate from ACMS.[supplied by OMIM, Oct 2004]

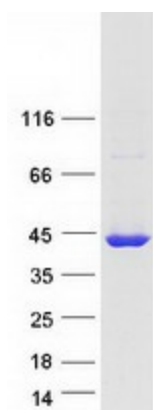
Product images:



Circular map for RC210656



Western blot validation of overexpression lysate (Cat# [LY408707]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210656 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACMSD protein (Cat# [TP310656]). The protein was produced from HEK293T cells transfected with ACMSD cDNA clone (Cat# RC210656) using MegaTran 2.0 (Cat# [TT210002]).