

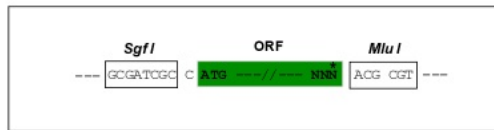
## Product datasheet for **RG210656**

### ACMSD (NM\_138326) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACMSD (NM_138326) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACMSD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



Kozac  
Consensus

EcoR I    BamH I Kpn I    RBS    Sgf I    Asc I

CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGGCCAGATCT

Hind III    Nhe I    Rsr II    Mlu I    Not I    Xho I    GFP Tag

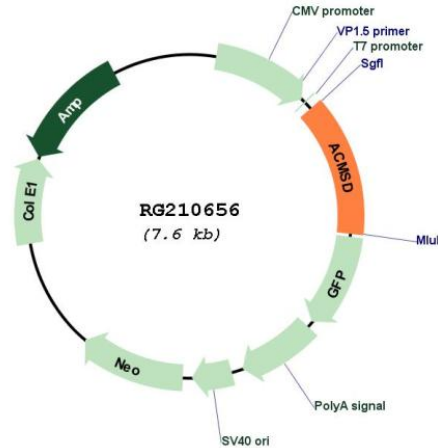
CAAGCTTAAGTCTAGCTAGCGGACCG    ACG CGT    ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---  
T R T R P L E M E S D - - -

Pme I    Fse I

--- --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT  
- - E E R V stop



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**Plasmid Map:**


**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](mailto: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:**

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

**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]