

## Product datasheet for **SC123129**

### ACMSD (NM\_138326) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ACMSD (NM_138326) Human Untagged Clone
Tag:	Tag Free
Symbol:	ACMSD
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	<p>&gt;OriGene sequence for NM_138326 edited</p> <pre>GGGGAGTTTTACAAAGTCTCTTGATATCAAACTTCTTTCCTTGCATGCTTCTCTGAT CCTGTGGAGATGAAAATTGACATCCATAGTCATATTCTACAAAAGAATGCCAGATCTA AAAAAGACCCCTGAGACAAGGATTGAGATGCAAGTAGTTTGGTGGAGGTGATCCCAGGA AACACCCAGTAGAGTGAGGAAGTGAGACAGGGAAAACAGGGCAGCCAGTGAAGAGGTTTG GCTACGGAGGCTGGGTGCAGCTCCAACACCACAGCAAGGGAGAAGCAAAGTTGTTGAAAG ATGGGAAAGTCTTCAGAGTGGTGCAGAGAAATTGCTGGGATCCAGAAGTTCGTATTAGAG AAATGGACCAAAAAGGCCAAACCTGAGGACACTTAAACCTGTGCCAGCTTTTAAACAAC GACCTTGCCAGCACCGTTGTGAGCTACCCAGGAGGTTTCGTGGGTCTGGGGACGTTGCC ATGCAGGCCCTGAGCTGGCGGTCAAGGAGATGGAGCGCTGTGTGAAAGAGCTGGGCTTT CCCGGGTCCAAATTGGCACCCACGTCAACGAGTGGGACCTGAACGCGCAGGAGCTTTT CCTGTCTATGCGGCAGCCGAAAGGCTGAAGTGTTCCCTGTTTCGTGCATCCCTGGGACATG CAGATGGATGGACGAATGGCCAAATACTGGCTCCCTTGGCTTGTAGGAATGCCAGCAGAG ACCACCATAGCCATTTGCTCCATGATCATGGGTGGAGTATTTGAGAAGTTTCCCAAAGT AAAGTGTGTTTCGCACATGGTGGTGGTGCCTTCCCTTCCAGTGGGAAGAATCTCCCAT GGATTCAGCATGCGCCAGATCTGTGTGCCAGGACAACCCATGAACCCGAAGAATAAC CTTGGTTCCTTTACACAGATGCTTTGGTTCATGATCCTCTGTCCCTCAAGCTGTTAACA GATGTCATAGGAAAGGATAAAGTCATTTTGGGAACCGATTACCCCTTCCACTAGGTGAG CTGGAACCTGGGAAACTAATAGAGTCCATGGAAGAATTTGATGAAGAAACAAAGAATAAA CTCAAAGCCGGCAATGCCCTGGCATTGTTGGGTCTTGAGAGAAAACAATTTGAATGACTG AATTTACTACAAAGGCAAACTTTCAAAGGATATCTATTTTGTCTAAATATGTATC AACAGGTATCAACAAAATCCTATTTTGAAGTATTTTACTCAGAAATGAATGTCCCAAATA TCCTAAATTATTCATAATAAAAAATGATTTGTAAGTGTTTTCTTCTGAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAA</pre>



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_138326 unedited  CACGTCAAATATTGTATACGACTCATATAGGGCGGCCGGAATTCGCCATTACGGCCGGG  GAGTTTTCAAAAAGGTCTTTGATATCAAACTTCTTTCCTTGATGCTTCTCTGATCCT  GTGGAGATGAAAATTGACATCCATAGTCATATTCTACAAAAGAATGGCCAGATCTAAAA  AAGACCTGAGACAAGGATTCAGATGCAAGTAGTTTGCTTTGGAGGTGATCCCAGGAAAC  ACCAGTAGAGTGAGGAAGTGAGACAGGGAAAACAGGGCAGCCAGTGAAAGAGGTTTGGCT  ACGGAGCTGGGTGCAGCTCCAACACCACAGCAAGGGAGAAGTTGTTGAAAAGATG  GGAAAGTCTTCAGAGTGGTGCAGAGAATTGCTGGGATCCAGAAGTTCGTATTAGAGAAA  TGGACCAAAAAGGCCAAACCTGAGGACACTTTAAACCTGTGCCAGCTTTTAAACAACGAC  CTTGCCAGCACCGTTGTGAGCTACCCAGGAGGTTCTGGGTCTGGGACGTTGCCCATG  CAGGCCCTGAGCTGGCGTCAAGGAGATGGAGCGCTGTGTAAAGAGCTGGGCTTTCC  GGNGTCCAAATTGGCACCCACGTCAACGAGTGGGACCTGAACGCGCAGGAGCTTTTCT  GTCTATGCGGCAGCCGAAAGGCTGAAGTGTCCCTGTTCTGTCATCCCTGGGACATGCAG  ATGGATGGACGAATGGCCAAATACTGGCTCCCTTGGCTTGTANGAATGCCAGCAGAGACC  ACCATAGCCATTTGCTCCATGATCATGGGTGGAGTATTTGAGAAGTTTCCCAACTGAAAG  TGTGTTTCCACATGGTGGTGGTCTTCCCTTCCAGTGGGAAGATCTCCATGGATTTCG  ATGCGCCAGTCTGTGC</p>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_138326
<b>Insert Size:</b>	1337 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_138326.1</a> , <a href="#">NP_612199.1</a>
<b>RefSeq Size:</b>	1337 bp

RefSeq ORF: 1278 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]  
Transcript Variant: This variant (1) encodes the longer isoform (1).