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Product datasheet for MC214255

Acmsd (NM_001033041) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Acmsd (NM_001033041) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Acmsd
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC214255 representing NM_001033041 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAAAATTGACATCCACACTCATATTCTACCAAAGGAATGGCCCGATCTAGAAAAGAGGTTTGGCTATG GAGGCTGGGTGCAGCTCCAACAGCAAGGCAAGGGAGAAGCAAAGATGATAAAAGATGGGAAGCTCTTCAG AGTGATCCAACAGAACTGCTGGGACCCAGAAGTTCGTATCAGAGAAATGAACCAGAAAGGAGTGACAGTC CAAGCTCTTTCCACAGTTCCTGTCATGTTTAGCTACTGGGCCAAACCTAAGGATACTTTGGAGCTGTGCC AGTTTTTAAACAATGACCTAGCTGCCACCGTTGCCAGATACCCTCGAAGGTTTGTGGGTTTGGGGACGTT GCCTATGCAAGCCCCGGAGCTGGCCGTCGAGGAGATGGAGCGTTGTGTTAAGGCGCTAGGATTTCCAGGA ATCCAGATTGGCTCCCACATCAACACATGGGACCTGAATGACCCGGAACTCTTCCCAATCTATGCTGCGG CCGAGAGGCTGAACTGTTCTCTGTTCGTGCATCCCTGGGATATGCAGATGGATGGACGAATGGCCAAATA CTGGCTGCCTTGGCTCGTAGGAATGCCATCGGAGACCACCATGGCCATTTGCTCCATGATCATGGGTGGG GTGTTTGAGAAGTTTCCCAAACTCAAAGTGTGCTTCGCACACGGAGGTGGTGCTTTCCCCTTCACCATAG GAAGAATTGCCCATGGATTCAACATGCGCCCAGATCTCTGTGCCCAGGACAATCCGTCTGACCCCAGAAA ATACCTTGGCTCCTTCTACACAGACTCCCTGGTTCACGATCCTCTGTCTCTCAAGCTATTGACAGATGTC ATAGGAAAGGATAAAGTCATGCTGGGAACTGATTACCCCTTTCCTCTGGGCGAGCAGGAGCCTGGGAAGC TGATAGAGTCCATGGCAGAGTTTGATGAAGAAACAAAGGATAAACTTACAGCTGGCAATGCCTTGGCTTT TTTGGGTCTTGAGAGAAAACTATTTGAATGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Restriction Sites:	SgfI-MluI
ACCN:	NM_001033041
Insert Size:	1011 bp

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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

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_001033041.2, NP_001028213.1

RefSeq Size: 2303 bp

RefSeq ORF: 1011 bp

Locus ID: 266645

UniProt ID: Q8R519

Cytogenetics: 1 E3

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]