2-Amino-3-Carboxymuconate-6-Semialdehyde Decarboxylase (ACMSD) Rat Recombinant Protein

PRODUCT OVERVIEW

Product Name	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase (Acmsd), Recombinant Protein
Full Product Name	Recombinant Rat 2-amino-3-carboxymuconate-6-semialdehyde decarboxylase (Acmsd)
Product Gene Name	Acmsd recombinant protein
Product Synonym Gene Name	Acmsd
Sequence	MKIDIHTHIL PKEWPDLEKR FGYGGWVQLQ QQGKGEAKMM KDGKVFRVIQ QNCWDPEVRI REMNQKGVTV QALSTVPVMF SYWAKPKDTL ELCQFLNNDL AATVARYPRR FVGLGTLPMQ APGLAVEEME RCVKELGFPG IQIGSHINMW DLNDPELFPI YTAAERLNCS LFVHPWDMQM DGRMAKYWLP WLVGMPSETT TAICSMIMGG VFEKFPKLKV CFAHGGGAFP FTIGRIAHGF NMRPDLCARD NSSDPRKYLG SFYTDSLVHD PLSLKLLTDV IGKDRVILGT DYPFPLGEQE PGKLIESMAD FDEETKDKLT AGNALTFLGL ERKLFE
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.
Molecular Weight	38,091 Da
Sequence Positions	1-336, full length protein
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
3D Structure	ModBase 3D Structure for Q8R5M5
Species	Rat
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for Acmsd recombinant protein	MBS1421401 is a recombinant protein targeting Acmsd. Also known as Recombinant Rat 2-amino-3-carboxymuconate-6-semialdehyde decarboxylase (Acmsd). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of Acmsd recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Acmsd. It may not necessarily be applicable to this product.

NCBI GI #	19705473
NCBI GeneID	171385
NCBI Accession #	NP_599199.1
UniProt Primary Accession #	Q8R5M5

UniProt Related Accession #	Q8R5M5
GenBank Nucleotide #	NM_134372.1
NCBI Official Full Name	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase
NCBI Official Synonym Full Names	aminocarboxymuconate semialdehyde decarboxylase
NCBI Official Symbol	Acmsd
UniProt Protein Name	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase
UniProt Synonym Protein Names	Picolinate carboxylase
Protein Family	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase
UniProt Gene Name	Acmsd
NCBI Protein Information	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase
UniProt Comments for Acmsd	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.
Research Articles on Acmsd	**1.** results provide the first evidence that alpha-amino-beta-carboxymuconate-epsilon-semialdehyde decarboxylase (ACMSD) is associated with cholesterol metabolism, and ACMSD gene expression may be upregulated by sterol regulatory element-binding protein-2
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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