Aspartate 1-Decarboxylase (panD) Geobacter Bemidjiensis Recombinant Protein

PRODUCT OVERVIEW

Product Name	Aspartate 1-decarboxylase (panD), Recombinant Protein
Full Product Name	Recombinant Geobacter bemidjiensis Aspartate 1-decarboxylase (panD)
Product Gene Name	panD recombinant protein
Product Synonym Gene Name	panD
Product Synonym Names	Recombinant Aspartate 1-decarboxylase (panD); Aspartate 1-decarboxylase EC= 4.1.1.11; Aspartate alpha-decarboxylase Cleaved into the following 2 chains: 1. Aspartate 1-decarboxylase beta chain 2. Aspartate 1-decarboxylase alpha chain
Sequence	MDRKMLKSKI HRATVTGADL HYEG
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 degree C. For extended storage, store at -20 or -80 degree C.
Molecular Weight	14,816 Da
Sequence Positions	1-24aa; 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.
Chromosome Location	NC_011146.1 (3478871..3479275, complement)
3D Structure	ModBase 3D Structure for B5E844
Species	Geobacter bemidjiensis (strain Bem / BAA-1014 / DSM 16622)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for panD recombinant protein	MBS1229250 is a recombinant protein targeting panD. Also known as Recombinant Geobacter bemidjiensis Aspartate 1-decarboxylase (panD). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of panD 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 panD. It may not necessarily be applicable to this product.

NCBI GI #	197119382
NCBI GeneID	6779866
NCBI Accession #	YP_002139809.1
UniProt Primary Accession #	B5E844

UniProt Related Accession #	B5E844
GenBank Nucleotide #	NC_011146.1
NCBI Official Full Name	aspartate alpha-decarboxylase
NCBI Official Symbol	panD
UniProt Protein Name	Aspartate 1-decarboxylase
UniProt Synonym Protein Names	Aspartate alpha-decarboxylase
Protein Family	Aspartate 1-decarboxylase
UniProt Gene Name	panD
UniProt Entry Name	PAND_GEOBB
NCBI Protein Information	aspartate alpha-decarboxylase
UniProt Comments for panD	Function: Catalyzes the pyruvoyl-dependent decarboxylation of aspartate to produce beta-alanine By similarity. HAMAP-Rule MF_00446 Catalytic activity: L-aspartate = beta-alanine + CO2. HAMAP-Rule MF_00446 Cofactor: Pyruvoyl group By similarity. HAMAP-Rule MF_00446 Pathway: Cofactor biosynthesis; (R)-pantothenate biosynthesis; beta-alanine from L-aspartate: step 1/1. HAMAP-Rule MF_00446 Subunit structure: Heterooctamer of four alpha and four beta subunits By similarity. Subcellular location: Cytoplasm By similarity HAMAP-Rule MF_00446. Post-translational modification: Is synthesized initially as an inactive proenzyme, which is activated by self-cleavage at a specific serine bond to produce a beta-subunit with a hydroxyl group at its C-terminus and an alpha-subunit with a pyruvoyl group at its N-terminus By similarity. HAMAP-Rule MF_00446 Sequence similarities: Belongs to the PanD family.
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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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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