Enterobactin Synthase Component E (entE) Escherichia Coli O157:h7 Recombinant Protein

PRODUCT OVERVIEW

Product Name	Enterobactin synthase component E (entE), Recombinant Protein
Full Product Name	Recombinant Escherichia coli O157:H7 Enterobactin synthase component E (entE)
Product Gene Name	entE recombinant protein
Product Synonym Gene Name	entE
Sequence	MSIPFTRWPE EFARRYREKG YWQDLPLTDI LTRHAASDSI AVIDGERQLS YRELNQAADN LACSLRRQGI KPGETALVQL GNVAELYITF FALLKLGVAP VLALFSHQRS ELNAYASQIE PALLIADRQH ALFSGDDFLN TFVAEHSSIR VVQLLNDSGE HNLQDAINHP ADGFTATPSP ADEVVYFQLS GGTTGTPKLI PRTHNDYYYS VRRSVEICQF TQQTRYLCAI PAAHNYAMSS PGSLGVFLAG GTVVLAADPS ATLCFPLIEK HQINVTALVP PAVSLWLQAL TEGESRAQLA SLKLLQVGGA RLSATLAARI PAEIGCQLQQ VFGMAEGLVN YTRLDDSAEK IIHTQGYPMC PDDEVWVADA EGNPLPQGEV GRLMTRGPYT FRGYYKSPQH NASAFDANGF YCSGDLISID PEGYITVQGR EKDQINRGGE KIAAEEIENL LLRHPAVIYA ALVSMEDELM GEKSCAYLVV KEPLRAVQVR RFLREQGIAE FKLPDRVECV DSLPLTAVGK VDKKQLRQWL ASRASA
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	59,040 Da
Sequence Positions	1-536, 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 Q8XBV3
Species	Escherichia coli O157:H7
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for entE recombinant protein	MBS1338139 is a recombinant protein targeting entE. Also known as Recombinant Escherichia coli O157:H7 Enterobactin synthase component E (entE). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of entE 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 entE. It may not necessarily be applicable to this product.

NCBI GI #	15829887
NCBI GeneID	916992

NCBI Accession #	NP_308660.1
UniProt Primary Accession #	Q8XBV3
GenBank Nucleotide #	NC_002695.1
NCBI Official Full Name	2,3-dihydroxybenzoate-AMP ligase
NCBI Official Symbol	entE
UniProt Protein Name	Enterobactin synthase component E
UniProt Synonym Protein Names	2,3-dihydroxybenzoate-AMP liase
Protein Family	Enterobactin synthase component
UniProt Gene Name	entE
UniProt Synonym Gene Names	DHB-AMP ligase
NCBI Protein Information	2,3-dihydroxybenzoate-AMP ligase
UniProt Comments for entE	Involved in the biosynthesis of the siderophore enterobactin (enterochelin), which is a macrocyclic trimeric lactone of N-(2,3-dihydroxybenzoyl)-serine. The serine trilactone serves as a scaffolding for the three catechol functionalities that provide hexadentate coordination for the tightly ligated iron2+ atoms. EntE proccesses via a two-step adenylation-ligation reaction (bi-uni-uni-bi ping-pong mechanism). First, it catalyzes the activation of the carboxylate group of 2,3-dihydroxy-benzoate (DHB), via a reversible ATP-dependent pyrophosphate exchange reactions to yield the acyladenylate intermediate 2,3-dihydroxybenzoyl-AMP. It can also transfer AMP to salicylate, 2,4-dihydroxybenzoate, gentisate and 2,3,4-trihydroxybenzoate. In the second step, DHB is transferred from 2,3-dihydroxybenzoyl-AMP onto the phosphopantetheinylated EntB (holo-EntB) to form DHB-holo-EntB. Then this product will serve in the formation of the amide bond between 2,3-dihydroxybenzoate (DHB) and L-serine.
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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