Bifunctional Enzyme Ispd/Ispf (ispDF) Sulfurimonas Denitrificans Recombinant Protein

PRODUCT OVERVIEW

Product Name	Bifunctional enzyme IspD/IspF (ispDF), Recombinant Protein
Full Product Name	Recombinant Sulfurimonas denitrificans Bifunctional enzyme IspD/IspF (ispDF)
Product Gene Name	ispDF recombinant protein
Product Synonym Gene Name	ispDF; Suden_1487
Product Synonym Names	Bifunctional enzyme IspD/IspF; Including the following 2 domains:; 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase; EC=2.7.7.60; 4-diphosphocytidyl-2C-methyl-D-erythritol synthase; MEP cytidylyltransferase; MCT; 2-C-methyl-D-erythritol 2,4-cyclod
Sequence	MYNFVTLSIL GAYLHTITLI LLAAGSSSRF ELDIKKQWLR VGDRPLWHFV ADRCEKTGYF DKIIITSSLD DIEFMKNYAD YTFVEGGQTR QQSLKNSLLH VDTEYVLVSD VARSCIDEAF LKKIISHVGK SDAVVPYLNI TDTIVYDDKT IDRERVKRVQ TPQLSLTTAL KSALLREEEF TDESSAIVAN GGSREFILGQ ESAHKITHIE DLKKLSCLSA PSSDTLSGVG FDVHAFDDKG EMFLGGIKID SEYGFLAHSD GDVAIHALID ALLGAAGMGD IGMMFPDNDV KYKGADSKEL LGTLVTKLRH FGFVIVNVDI TIAAEKPRIG NYKMAMRKKI SSILGIDAQR VNIKATTTEK LGFIGRGEGV GVIANANLKY FDWTKI
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	42,678 Da
Sequence Positions	1-386aa; 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 Q30QG7
Species	Sulfurimonas denitrificans (strain 33889 / DSM 1251) (Thiomicrospira denitrificans (strain 33889 / DSM 1251))
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for ispDF recombinant protein	MBS1380443 is a recombinant protein targeting ispDF. Also known as Recombinant Sulfurimonas denitrificans Bifunctional enzyme IspD/IspF (ispDF). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of ispDF 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 ispDF. It may not necessarily be applicable to this product.

NCBI GI #	78777684
NCBI GeneID	3763482

NCBI Accession #	YP_393999.1
UniProt Primary Accession #	Q30QG7
UniProt Related Accession #	Q30QG7
GenBank Nucleotide #	NC_007575.1
NCBI Official Full Name	bifunctional 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase/2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase
NCBI Official Symbol	ispDF
UniProt Protein Name	Bifunctional enzyme IspD/IspF
UniProt Synonym Protein Names	4-diphosphocytidyl-2C-methyl-D-erythritol synthase; MEP cytidylyltransferase;
Protein Family	Bifunctional enzyme
UniProt Gene Name	ispDF
UniProt Synonym Gene Names	Suden_1487; MCT; MECDP-synthase; MECPP-synthase; MECPS
UniProt Entry Name	ISPDF_SULDN
NCBI Protein Information	bifunctional 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase/2-C-methyl-D-erythritol 2,4-cyclodiphosphate synthase
UniProt Comments for ispDF	Bifunctional enzyme that catalyzes the formation of 4-diphosphocytidyl-2-C-methyl-D-erythritol from CTP and 2-C-methyl-D-erythritol 4-phosphate (MEP) (IspD), and catalyzes the conversion of 4-diphosphocytidyl-2-C-methyl-D-erythritol 2-phosphate (CDP-ME2P) to 2-C-methyl-D-erythritol 2,4-cyclodiphosphate (ME-CPP) with a corresponding release of cytidine 5-monophosphate (CMP) (IspF).
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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