Thiazole Synthase (thiG) Escherichia Coli Recombinant Protein

PRODUCT OVERVIEW

Product Name	Thiazole synthase (thiG), Recombinant Protein
Full Product Name	Recombinant Escherichia coli Thiazole synthase (thiG)
Product Gene Name	thiG recombinant protein
Sequence	MLRIADKTFD SHLFTGTGKF ASSQLMVEAI RASGSQLVTL AMKRVDLRQH NDAILEPLIA AGVTLLPNTS GAKTAEEAIF AAHLAREALG TNWLKLEIHP DARWLLPDPI ETLKAAETLV QQGFVVLPYC GADPVLCKRL EEVGCAAVMP LGAPIGSNQG LETRAMLEII IQQATVPVVV DAGIGVPSHA AQALEMGADA VLVNTAIAVA DDPVNMAKAF RLAVEAGLLA RQSGPGSRSY FAHATSPLTG FLEASA
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	26,896 Da
Sequence Positions	1-256, 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 P30139
Species	Escherichia coli (strain K12)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for thiG recombinant protein	MBS1245362 is a recombinant protein targeting thiG. Also known as Recombinant Escherichia coli Thiazole synthase (thiG). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of thiG 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 thiG. It may not necessarily be applicable to this product.

NCBI GI #	33347812
NCBI GeneID	948493
NCBI Accession #	NP_418418.2
UniProt Primary Accession #	P30139
UniProt Secondary Accession #	P76779; Q2M8S7
GenBank Nucleotide #	NC_000913.3

NCBI Official Full Name	thiamine biosynthesis ThiGH complex subunit
NCBI Official Symbol	thiG
NCBI Official Synonym Symbols	ECK3982; JW5549; thiB
UniProt Protein Name	Thiazole synthase
Protein Family	Thiazole synthase
UniProt Gene Name	thiG
NCBI Protein Information	thiamine biosynthesis ThiGH complex subunit
NCBI Summary for thiG	The ThiG sequence has been confirmed using MS/MS: the measured mass of the intact protein is 26896.5 indicating that the initial Met is not clipped (Kelleher, 1998). [More information is available at EcoGene: EG11589]. The ThiGH complex catalyzes the conversion of 1-deoxy-D-xylulose 5-phosphate to a thiazole as part of thiamine synthesis. [More information is available at EcoCyc: EG11589].
UniProt Comments for thiG	Catalyzes the rearrangement of 1-deoxy-D-xylulose 5-phosphate (DXP) to produce the thiazole phosphate moiety of thiamine. Sulfur is provided by the thiocarboxylate moiety of the carrier protein ThiS. In vitro, sulfur can be provided by H2S.
Research Articles on thiG	**1.** Results describe the substrates and purified proteins required for Escherichia coli thiazole synthase subunits ThiG and ThiH in vitro.
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.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/recombinant-protein/thiazole-synthase-thig/1245362