Beta-Carotene 3-Hydroxylase, Chloroplastic (BHY) Gentiana Lutea Recombinant Protein

PRODUCT OVERVIEW

Product Name	Beta-carotene 3-hydroxylase, chloroplastic (BHY), Recombinant Protein
Full Product Name	Recombinant Gentiana lutea Beta-carotene 3-hydroxylase, chloroplastic (BHY)
Product Gene Name	BHY recombinant protein
Product Synonym Gene Name	BHY
Product Synonym Names	Recombinant Beta-carotene 3-hydroxylase, chloroplastic (BHY); Beta-carotene 3-hydroxylase, chloroplastic; GenCHYB EC= 1.14.13.129
Sequence	ASDDDDGAGE VRKQREKEIS ASAEKLAQKL ARKKSERFTY LVAAVMSSFG ITSMAVLSVY YRFSWQMEGG EIPLSEMFGT FALSVGAAVG MEFWARWAHE ALWHASLWHM HESHHKPREG PFELNDIFAI INAVPAIALL SYGFFHKGLI PGLCFGAGLG ITVFGMAYMF VHDGLVHKRF PVGPIADVPY FRRVAAAHTL HHSDKFNGVP YGLFLGPKEL EEVGGLQVLE MEINRRTKNN QS
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	35,574 Da
Sequence Positions	79-320
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 B3SGL0
Species	Gentiana lutea (Yellow gentian)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for BHY recombinant protein	MBS1160968 is a recombinant protein targeting BHY. Also known as Recombinant Gentiana lutea Beta-carotene 3-hydroxylase, chloroplastic (BHY). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of BHY 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 BHY. It may not necessarily be applicable to this product.

UniProt Primary Accession #	B3SGL0
UniProt Secondary Accession #	Q1XIT1
UniProt Protein Name	Beta-carotene 3-hydroxylase, chloroplastic
UniProt Gene Name	BHY

UniProt Synonym Gene Names	GenCHYB
UniProt Entry Name	BCH_GENLU
UniProt Comments for BHY	Function: Nonheme diiron monooxygenase involved in the biosynthesis of xanthophylls. Specific for beta-ring hydroxylations of beta-carotene. Uses ferredoxin as an electron donor Probable. Ref.1 Catalytic activity: Beta-carotene + 2 NADH + 2 O2 = zeaxanthin + 2 NAD+ + 2 H2O. Subcellular location: Plastid › chloroplast membrane; Multi-pass membrane protein Potential. Developmental stage: Up-regulated during flower development. Ref.1 Domain: The histidine box domains may contain the active site and/or be involved in iron binding. Sequence similarities: Belongs to the sterol desaturase 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.
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/beta-carotene-3-hydroxylase-chloroplastic-bhy/1160968