Carotenoid Cleavage Dioxygenase 7, Chloroplastic (CCD7) Arabidopsis Thaliana Recombinant Protein

PRODUCT OVERVIEW

Product Name	Carotenoid cleavage dioxygenase 7, chloroplastic (CCD7), Recombinant Protein
Full Product Name	Recombinant Arabidopsis thaliana Carotenoid cleavage dioxygenase 7, chloroplastic (CCD7) , partial
Product Gene Name	CCD7 recombinant protein
Product Synonym Gene Name	CCD7
Sequence	AAISISIPDT GLGRTGTILD ESTSSAFRDY QSLFVSQRSE TIEPVVIKPI EGSIPVNFPS GTYYLAGPGL FTDDHGSTVH PLDGHGYLRA FHIDGNKRKA TFTAKYVKTE AKKEEHDPVT DTWRFTHRGP FSVLKGGKRF GNTKVMKNVA NTSVLKWAGR LLCLWEGGEP YEIESGSLDT VGRFNVENNG CESCDDDDSS
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	69,453 Da
Sequence Positions	32-231, Partial.
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 Q7XJM2
Species	Arabidopsis thaliana (Mouse-ear cress)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CCD7 recombinant protein	MBS1385978 is a recombinant protein targeting CCD7. Also known as Recombinant Arabidopsis thaliana Carotenoid cleavage dioxygenase 7, chloroplastic (CCD7) , partial. Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of CCD7 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 CCD7. It may not necessarily be applicable to this product.

NCBI GI #	1063699255
NCBI GeneID	819107
NCBI Accession #	NP_001318427.1
UniProt Primary Accession #	Q7XJM2

UniProt Secondary Accession #	Q0WMG3; F4IV47
UniProt Related Accession #	Q7XJM2
GenBank Nucleotide #	NM_001337111.1
NCBI Official Full Name	carotenoid cleavage dioxygenase 7
NCBI Official Symbol	CCD7
NCBI Official Synonym Symbols	D7; carotenoid cleavage dioxygenase 7; MAX3; T14P1.21
UniProt Protein Name	Carotenoid cleavage dioxygenase 7, chloroplastic
UniProt Synonym Protein Names	AtNCED7; Beta,beta-carotene 9',10'-oxygenase (EC:1.13.11.68); Protein MORE AXILLARY BRANCHING 3; Protein MORE AXILLARY GROWTH 3
Protein Family	Carotenoid cleavage dioxygenase
UniProt Gene Name	CCD7
UniProt Synonym Gene Names	MAX3; NCED7
NCBI Protein Information	carotenoid cleavage dioxygenase 7
NCBI Summary for CCD7	More Axillary Branching; carotenoid cleavage dioxygenases.
UniProt Comments for CCD7	Involved in strigolactones biosynthesis by cleaving asymmetrically a variety of linear and cyclic carotenoids at the 9-10 double bond. Produces one C(13) beta-ionone and the C(27) 10'-apo-beta-carotenal. Strigolactones are hormones that inhibit tillering and shoot branching through the MAX-dependent pathway, contribute to the regulation of shoot architectural response to phosphate-limiting conditions and function as rhizosphere signal that stimulates hyphal branching of arbuscular mycorrhizal fungi and trigger seed germination of root parasitic weeds. No activity on lycopene, lutein, zeaxanthin, violaxanthin or neoxanthin. Probably not involved in abscisic acid biosynthesis.
Research Articles on CCD7	**1.** enzymatic potential to form acyclic regulatory metabolites
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/carotenoid-cleavage-dioxygenase-7-chloroplastic-ccd7/1385978