

Chlorophyll a-b binding protein 8, chloroplastic (CAB8), Recombinant Protein

Cat *RP17921*

Species

Pisum sativum (Garden pea)

Full Product Name

Recombinant *Pisum sativum* Chlorophyll a-b binding protein 8, chloroplastic (CAB8)

Product Gene Name

CAB8 recombinant protein

Product Synonym Gene Name

Recombinant Chlorophyll a-b binding protein 8, chloroplastic (CAB8); Chlorophyll a-b binding protein 8, chloroplastic; LHCII type I CAB-8

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

RKSATTKKVA SSGSPWYGPD RVKYLGPFSG ESPSYLTGEF PGDYGWDTAG LSADPETFSK NRELEVIHSR
WAMLGALGCV FPELLSRNGV KFGEAVWFKA GSQIFSEGGL DYLGNP SLVH AQSILAIWAT QVILMGAVEG
YRIAGGPLGE VVDPLYPGGS FDPLGLADDP EAFAELKVKE LKNGRLAMFS MFGFFVQAIV TGKGPLENLA
DHLSDPVNNN AWSYATNFVP GK

Sequence Positions

37-268

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E. coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

28,526 Da

Storage

Store at -20°C. For extended storage, store at -20 or -80°C.

Protein Family

Chlorophyll a-b binding protein

NCBI Accession

P27490.1

NCBI GI

115814

NCBI Official Full Name

Chlorophyll a-b binding protein 8, chloroplastic

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Chlorophyll a-b binding protein 8, chloroplastic (CAB8), Recombinant Protein

Cat RP17921

UniProt Gene Name

CAB8

UniProt Synonym Gene Names

LHCB1

UniProt Protein Name

Chlorophyll a-b binding protein 8, chloroplastic

UniProt Synonym Protein Names

LHCII type I CAB-8

UniProt Entry Name

CB28_PEA

UniProt Primary Accession

P27490

UniProt Comments

Function: The light-harvesting complex (LHC) functions as a light receptor, it captures and delivers excitation energy to photosystems with which it is closely associated. May channel protons produced in the catalytic Mn center of water oxidation into the thylakoid lumen.

Cofactor: Binds at least 14 chlorophylls (8 Chl-a and 6 Chl-b) and carotenoids such as lutein and neoxanthin

By similarity.

Subunit structure: The LHC complex consists of chlorophyll a-b binding proteins.

Subcellular location: Plastid › chloroplast thylakoid membrane; Multi-pass membrane protein.

Domain: The N-terminus of the protein extends into the stroma where it is involved with adhesion of granal membranes and post-translational modifications; both are believed to mediate the distribution of excitation energy between photosystems I and II.

Post-translational modification: Photoregulated by reversible phosphorylation of its threonine residues

By similarity.

Sequence similarities: Belongs to the light-harvesting chlorophyll a/b-binding (LHC) protein family.

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