

Chlorophyll a-b binding protein 4, chloroplastic (CAB4), Recombinant Protein

Cat *RP14951*

Species

Solanum lycopersicum (Tomato) (*Lycopersicon esculentum*)

Full Product Name

Recombinant *Solanum lycopersicum* Chlorophyll a-b binding protein 4, chloroplastic (CAB4)

Product Synonym Names

Recombinant Chlorophyll a-b binding protein 4, chloroplastic (CAB4); Chlorophyll a-b binding protein 4, chloroplastic; LHCII type I CAB-4; LHCP

Product Gene Name

CAB4 recombinant protein

Product Synonym Gene Name

CAB4

Purity

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

Sequence

RRTVKSAPQS IWYGEDRPKY LGPFSEQTPS YLTGEFPGDY GWDTAGLSAD PETFARNREL EVIHCRWAML
GALGCVFPEI LSKNGVKFGE AVWFKAGSQI FSEGLDYLG NPNLVHAQSI LAIWACQVVL MGFVEGYRVG
GGPLGEGLDK IYPGGAFDPL GLADDPEAFA ELKVKEIKNG RLAMFSMFGF FVQAIVTGKG PIENLSDHIN
DPVANNAWAY ATNFVPGK

Sequence Positions

38-265

Format

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

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

28,775 Da

Storage

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

NCBI Accession

NP_001234739.1

NCBI GI

407970998

NCBI GenBank Nucleotide

NM_001247810.1

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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Cat *RP14951*

NCBI GeneID

543975

NCBI Official Full Name

chlorophyll a-b binding protein 4, chloroplastic

NCBI Official Symbol

CAB4

NCBI Official Synonym Symbols

LHCP

NCBI Protein Information

chlorophyll a-b binding protein 4, chloroplastic; LHCII type I CAB-4

UniProt Gene Name

CAB4

UniProt Synonym Gene Names

LHCP

UniProt Protein Name

Chlorophyll a-b binding protein 4, chloroplastic

UniProt Synonym Protein Names

LHCII type I CAB-4

UniProt Entry Name

CB24_SOLLC

UniProt Primary Accession

P14278

UniProt Related Accession

P14278

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. 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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