

Dihydrolipoyl dehydrogenase 1, mitochondrial (LPD1), Recombinant Protein

Cat *RP01963*

Size 0.02 mg (*E-Coli*)/ 0.02 mg (*Yeast*)/ 0.1 mg (*E-Coli*)/ 0.1 mg (*Yeast*)/ 0.02 mg (*Baculovirus*)/ 0.02 mg (*Mammalian-Cell*)/ 0.1

mg (*Baculovirus*)/ 1 mg (*E-Coli*)/ 0.1 mg (*Mammalian-Cell*)/ 1 mg (*Yeast*)/ 1 mg (*Baculovirus*)/ 0.5 mg (*Mammalian-Cell*)
Species *Arabidopsis thaliana* (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Dihydrolipoyl dehydrogenase 1, mitochondrial (LPD1)

Product Gene Name

LPD1 recombinant protein

Product Synonym Gene Name

LPD1

Purity

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

Sequence

ASSGSDENDV VIIGGGPGGY VAAIKASQLG LKTTICIEKRG ALGGTCLNVG CIPSKALLHS SHMYHEAKHS
FANHGIKVSS VEVDLPAMLA QKDNAVKNTL RGIEGLFKKN KVTYVKGYGK FISPNEVSVE TIDGGNTIVK
GKHIVATGS DVKSLPGITI DEKKIVSSTG ALSLSEVPPK LIVIGAGYIG LEMGSVWGRL GSEVTVVEFA
GDIVPSMDGE IRKQFQRSLE KQKMKFMLKT KVVSVDSSTD GVKLTVEPAE GGEQSILEAD VVLVSAGRTP
FTSGLDLEKI GVETDKAGRI LVNDRFLSNV PGVYAIGDVI PGPM LAHKAE EDGVACVEFI AGKHGHVDYD
KVPGVVYTHP EVASVGKTEE QLKKEGVSYR VGKFPFMANS RAKAIDNAEG LVKILADKET DKILGVHIMA
PNAGELIHEA VLAINYDASS EDIARVCHAH PTMSEALKEA AMATYDKPIH I

Sequence Positions

37-507, Full length protein

Format

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

Host

E Coli or *Yeast* or *Baculovirus* or *Mammalian Cell*

Molecular Weight

53,988 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Dihydrolipoyl dehydrogenase

NCBI Accession

NP_001322047.1

NCBI GI

1063693943

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
NCBI GenBank Nucleotide #
NM_001333291.1

NCBI GeneID

841221

NCBI Official Full Name

mitochondrial lipoamide dehydrogenase 1

NCBI Official Symbol

mtLPD1

NCBI Official Synonym Symbols

mitochondrial lipoamide dehydrogenase 1; T2J15.6

NCBI Protein Information

mitochondrial lipoamide dehydrogenase 1

NCBI Summary

Encodes a mitochondrial lipoamide dehydrogenase whose expression is induced by light.

UniProt Gene Name

LPD1

UniProt Synonym Gene Names

AtmLPD1; mtLPD1; E3-1; PDC-E3 1

UniProt Protein Name

Dihydrolipoyl dehydrogenase 1, mitochondrial

UniProt Synonym Protein Names

Dihydrolipoamide dehydrogenase 1; Glycine cleavage system L protein 1; Pyruvate dehydrogenase complex E3 subunit 1; E3-1; PDC-E3 1

UniProt Primary Accession

Q9M5K3

UniProt Secondary Accession

Q9LNF3

UniProt Related Accession

Q9M5K3

UniProt Comments

Lipoamide dehydrogenase is a component of the glycine decarboxylase (GDC) or glycine cleavage system as well as of the alpha-ketoacid dehydrogenase complexes. LPD1 is probably the protein most often associated with the glycine decarboxylase complex while LPD2 is probably incorporated into alpha-ketoacid dehydrogenase complexes.

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