

Long chain acyl-CoA synthetase 1 (LACS1), Recombinant Protein

Cat RP05277

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Long chain acyl-CoA synthetase 1 (LACS1) , partial

Product Gene Name

LACS1 recombinant protein

Purity

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

Format

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

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

74,598 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

Long chain acyl-CoA synthetase

NCBI Accession

NP_001031554.1

NCBI GI

79324939

NCBI GenBank Nucleotide

NM_001036477.1

NCBI GeneID

819337

NCBI Official Full Name

AMP-dependent synthetase and ligase family protein

NCBI Official Symbol

LACS1

NCBI Official Synonym Symbols

CER8; ECERIFERUM 8; LONG-CHAIN ACYL-COA SYNTHASE 1; T8I13.8

NCBI Protein Information

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Long chain acyl-CoA synthetase 1 (LACS1), Recombinant Protein

Cat *RP05277*

AMP-dependent synthetase and ligase family protein

NCBI Summary

Encodes an acyl-CoA synthetase that acts on long-chain and very-long-chain fatty acids, involved in cuticular wax and cutin biosynthesis

UniProt Gene Name

LACS1

UniProt Synonym Gene Names

CER8

UniProt Protein Name

Long chain acyl-CoA synthetase 1

UniProt Synonym Protein Names

Protein ECERIFERUM 8

UniProt Primary Accession

O22898

UniProt Secondary Accession

Q56WP3; Q56ZG8

UniProt Related Accession

O22898

UniProt Comments

Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Acts in both the wax and cutin pathways. Preferentially uses palmitate, palmitoleate, linoleate and eicosenoate. Seems to have a specific activity against very long-chain fatty acid (VLCFA) class with acids longer than 24 carbons (C(24)).

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