

1-aminocyclopropane-1-carboxylate synthase (ACS-1), Recombinant Protein

Cat *RP16290*

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

Malus domestica (Apple) (*Pyrus malus*)

Full Product Name

Recombinant *Malus domestica* 1-aminocyclopropane-1-carboxylate synthase (ACS-1)

Product Gene Name

ACS-1 recombinant protein

Purity

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

Sequence

MRMLSRNATF NSHGQDSSYF LGWQEYEKNP YHEVHNTNGI IQMGLAENQL CFDLLESWLA KNPEAAAFKK
NGESIFAELA LFQDYHGLPA FKKAMVDFMA EIRGNKVTFD PNHLVLTAGA TSANETFIFC LADPGEAVLI
PTPYYPGFDR DLKWRTGVEI VPIHCTSSNG FQITETALEE AYQEAERNL RVKGVLVVNP SNPLGTTMTR
NELYLLLSFV EDKGIHLISD EIYSGTAFSS PSFISVMEVL KDRNCDENSE VWQRVHVWVYS LSKDLGLPGF
RVGAIYSNDD MVVAAATKMS SFGLVSSQTQ HLLSAMLSDK KLTKNYIAEN HKRLKQRQKK LVSGLQKSGI
SCLNGNAGLF CWVDMRHLLR SNTFEAEMEL WKKIVYEVHL NISPGSSCHC TEPGWFRVCF ANLPERTLDL
AMQRLKAFVG EYYNVPEVNG GSQSSHLSHS RRQSLTKWVS RLSFDDRGPI PGR

Sequence Positions

1-473, 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

53,251 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.

NCBI Accession

P37821.2

NCBI GI

3041658

NCBI Official Full Name

1-aminocyclopropane-1-carboxylate synthase

UniProt Gene Name

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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ACS-1

UniProt Synonym Gene Names

ACC synthase

UniProt Protein Name

1-aminocyclopropane-1-carboxylate synthase

UniProt Synonym Protein Names

S-adenosyl-L-methionine methylthioadenosine-lyase

UniProt Primary Accession

P37821

UniProt Secondary Accession

O04993; Q40278

UniProt Comments

Catalyzes the formation of 1-aminocyclopropane-1-carboxylate, a direct precursor of ethylene in higher plants (PubMed:7809054, PubMed:11591146). Catalyzes also the conversion of L-vinylglycine (L-VG) to alpha-ketobutyrate and ammonia (PubMed:10704193). Can use S-methylmethionine as substrate (PubMed:14678788).

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