

1-aminocyclopropane-1-carboxylate oxidase 3 (At1g12010), Recombinant Protein

Cat *RP09228*

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*)/ 1 mg (*Yeast*)/ 0.1 mg
(*Mammalian-Cell*)/ 1 mg (*Baculovirus*)/ 0.5 mg (*Mammalian*

Species^{Cell}

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* 1-aminocyclopropane-1-carboxylate oxidase 3 (At1g12010)

Product Gene Name

At1g12010 recombinant protein

Purity

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

Sequence

MEMNIKFPVI DLSKLNGEER DQTMALIDDA CQNWGGFFELV NHGLPYDLMD NIERMTKEHY KKHMEQKFKE
MLRSKGLDTL ETEVEDVDWE STFYLHHL PQ SNLYDIPDMS NEYRLAMKDF GKRLEILAE LLDLLCENLG
LEKGYLKKVF HGTTGPTFAT KLSNYPPCPK PEMIKGLRAH TDAGGLILLF QDDKVSGQLQL LKDGDWVDVP
PLKHSIVINL GDQLEVITNG KYKSVMHRVM TQKEGNRMSI ASFYNPGSDA EISPATSLVD KDSKYPSEVF
DDYMKLYAGL KFAQEPRFE AMKNAEAAAD LNPVAVVETF

Sequence Positions

1-320, 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

36,532 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

1-aminocyclopropane-1-carboxylate oxidase

NCBI Accession

NP_172665.1

NCBI GI

15221170

NCBI GenBank Nucleotide

NM_101073.3

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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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)/ 1 mg (Yeast)/ 0.1 mg
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-
Cell)

NCBI GeneID

837753

NCBI Official Full Name

2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein

NCBI Official Symbol

AT1G12010

NCBI Official Synonym Symbols

F12F1.12; F12F1_12

NCBI Protein Information

2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein

NCBI Summary

Encodes a protein that appears to have 1-amino-cyclopropane-1-carboxylic acid oxidase activity based on mutant analyses.

UniProt Gene Name

At1g12010

UniProt Synonym Gene Names

ACC oxidase 3; AtACO3

UniProt Protein Name

1-aminocyclopropane-1-carboxylate oxidase 3

UniProt Primary Accession

O65378

UniProt Related Accession

O65378

UniProt Comments

Enzyme involved in the ethylene biosynthesis. May promote stem elongation by maximizing the extensibility cells, possibly by activating ethylene biosynthesis, in response to very-long-chain fatty acids (VLCFAs C20:0 to C30:0).

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