

Ent-kaurene oxidase, chloroplastic (KO1), Recombinant Protein

Cat RP00275

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Ent-kaurene oxidase, chloroplastic (KO1) , partial

Product Gene Name

KO1 recombinant protein

Product Synonym Gene Name

KO1

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

58,160 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

NP_197962.1

NCBI GI

15239520

NCBI GenBank Nucleotide

NM_122491.3

NCBI GeneID

832659

NCBI Official Full Name

GA requiring 3

NCBI Official Symbol

GA3

NCBI Official Synonym Symbols

ARABIDOPSIS THALIANA ENT-KAURENE OXIDASE 1; ATKO1; CYP701A3; CYTOCHROME P450 701 A3; ENT-KAURENE OXIDASE; GA requiring 3; KO; T1N24.23; T1N24_23

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Ent-kaurene oxidase, chloroplastic (KO1), Recombinant Protein

Cat *RP00275*

NCBI Protein Information

GA requiring 3

NCBI Summary

Encodes a member of the CYP701A cytochrome p450 family that is involved in later steps of the gibberellin biosynthetic pathway.

UniProt Gene Name

KO

UniProt Synonym Gene Names

CYP701A3; GA3; KO1; AtKO1

UniProt Protein Name

Ent-kaurene oxidase, chloroplastic

UniProt Synonym Protein Names

Cytochrome P450 701A3

UniProt Primary Accession

Q93ZB2

UniProt Secondary Accession

O81188; Q9S7C8

UniProt Related Accession

Q93ZB2

UniProt Comments

Catalyzes three successive oxidations of the 4-methyl group of ent-kaurene giving kaurenoic acid, a key step in gibberellins (GAs) biosynthesis. GAs, which are involved many processes, including stem elongation, play a central role in plant development.

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