

2-oxoglutarate dioxygenase (ethylene-forming)

Cat. No. EXWM-0611

Lot. No. (See product label)

Introduction

Description

This is one of two simultaneous reactions catalysed by the enzyme, which is responsible for ethylene production in bacteria of the *Pseudomonas syringae* group. In the other reaction [EC 1.14.11.34, 2-oxoglutarate/L-arginine monooxygenase/decarboxylase (succinate-forming)] the enzyme catalyses the mono-oxygenation of both 2-oxoglutarate and L-arginine, forming succinate, carbon dioxide and L-hydroxyarginine, which is subsequently cleaved into guanidine and (S)-1-pyrroline-5-carboxylate. The enzymes catalyse two cycles of the ethylene-forming reaction for each cycle of the succinate-forming reaction, so that the stoichiometry of the products ethylene and succinate is 2:1.

Synonyms

ethylene-forming enzyme; EFE

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.13.12.19

Reaction

$2\text{-oxoglutarate} + \text{O}_2 = \text{ethylene} + 3 \text{CO}_2 + \text{H}_2\text{O}$

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.