

(R)-dichlorprop dioxygenase (2-oxoglutarate)

Cat. No. EXWM-0663

Lot. No. (See product label)

Introduction

Description

Fe²⁺-dependent enzyme. The enzymes from the Gram-negative bacteria *Delftia acidovorans* MC1 and *Sphingomonas herbicidovorans* MH are involved in the degradation of the (R)-enantiomer of the phenoxyalkanoic acid herbicides mecoprop and dichlorprop.

Synonyms

RdpA; α-ketoglutarate-dependent (R)-dichlorprop dioxygenase; (R)-phenoxypropionate/α-ketoglutarate-dioxygenase; 2-oxoglutarate-dependent (R)-dichlorprop dioxygenase; (R)-mecoprop dioxygenase; 2-oxoglutarate-dependent (R)-mecoprop dioxygenase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.11.44

Reaction

(1) (R)-2-(4-chloro-2-methylphenoxy)propanoate + 2-oxoglutarate + O₂ = 4-chloro-2-methylphenol + pyruvate + succinate + CO₂; (2) (R)-(2,4-dichlorophenoxy)propanoate + 2-oxoglutarate + O₂ = 2,4-dichlorophenol + pyruvate + succinate + CO₂

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.