Creative Enzymes®

(S)-dichlorprop dioxygenase (2-oxoglutarate)

Cat. No. EXWM-0662

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 (S)-enantiomer of the phenoxyalkanoic acid herbicides mecoprop and dichlorprop.
Synonyms	SdpA; α-ketoglutarate-dependent (S)-dichlorprop dioxygenase; (S)-phenoxypropionate/α-ketoglutarate-dioxygenase; 2-oxoglutarate-dependent (S)-dichlorprop dioxygenase; (S)-mecoprop dioxygenase; 2-oxoglutarate-dependent (S)-mecoprop dioxygenase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.11.43
Reaction	(1) (S)-2-(4-chloro-2-methylphenoxy)propanoate + 2-oxoglutarate + O2 = 4-chloro-2-methylphenol + pyruvate + succinate + CO2; (2) (S)-(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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.