

## (S)-dichlorprop dioxygenase (2-oxoglutarate)

Cat. No. EXWM-0662

Lot. No. (See product label)

### Introduction

**Description** Fe<sup>2+</sup>-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 + O<sub>2</sub> = 4-chloro-2-methylphenol + pyruvate + succinate + CO<sub>2</sub>; (2) (S)-(2,4-dichlorophenoxy)propanoate + 2-oxoglutarate + O<sub>2</sub> = 2,4-dichlorophenol + pyruvate + succinate + CO<sub>2</sub>

**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.