

## bisdemethoxycurcumin synthase

Cat. No. EXWM-2157

Lot. No. (See product label)

### Introduction

#### Description

A polyketide synthase characterized from the plant *Oryza sativa* (rice) that catalyses the formation of the C6-C7-C6 diarylheptanoid scaffold of bisdemethoxycurcumin. Unlike the process in the plant *Curcuma longa* (turmeric), where the conversion is carried out via a diketide intermediate by two different enzymes (EC 2.3.1.218, phenylpropanoylacetyl-CoA synthase and EC 2.3.1.217, curcumin synthase), the diketide intermediate formed by this enzyme remains within the enzyme's cavity and is not released to the environment.

#### Synonyms

CUS; curcuminoid synthase (ambiguous)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.3.1.211

#### Reaction

$2 \text{ 4-coumaroyl-CoA} + \text{malonyl-CoA} + \text{H}_2\text{O} = 3 \text{ CoA} + \text{bisdemethoxycurcumin} + 2 \text{ CO}_2$

#### 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.