

## benzoyl-CoA 2,3-epoxidase

Cat. No. EXWM-0809

Lot. No. (See product label)

### Introduction

#### Description

The enzyme is involved in aerobic benzoate metabolism in *Azoarcus evansii*. BoxB functions as the oxygenase part of benzoyl-CoA oxygenase in conjunction with BoxA, the reductase component, which upon binding of benzoyl-CoA, transfers two electrons to the ring in the course of monooxygenation. BoxA is a homodimeric 46 kDa iron-sulfur-flavoprotein (FAD), BoxB is a monomeric iron-protein.

#### Synonyms

benzoyl-CoA dioxygenase/reductase (incorrect); BoxBA; BoxA/BoxB system; benzoyl-CoA 2,3-dioxygenase (incorrect)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.13.208

#### Reaction

$\text{benzoyl-CoA} + \text{NADPH} + \text{H}^+ + \text{O}_2 = 2,3\text{-epoxy-2,3-dihydrobenzoyl-CoA} + \text{NADP}^+ + \text{H}_2\text{O}$

#### 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.