

## naphthalene 1,2-dioxygenase

Cat. No. EXWM-0681

Lot. No. (See product label)

### Introduction

#### Description

This enzyme is a member of the ring-hydroxylating dioxygenase (RHD) family of bacterial enzymes that play a critical role in the degradation of aromatic compounds, such as polycyclic aromatic hydrocarbons. This enzyme comprises a multicomponent system, containing a reductase that is an iron-sulfur flavoprotein (FAD; EC 1.18.1.3, ferredoxin-NAD<sup>+</sup> reductase), an iron-sulfur oxygenase, and ferredoxin. Requires Fe<sup>2+</sup>.

#### Synonyms

naphthalene dioxygenase; naphthalene oxygenase; NDO

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.12.12

#### CAS No.

9074-04-8

#### Reaction

naphthalene + NADH + H<sup>+</sup> + O<sub>2</sub> = (1R,2S)-1,2-dihydronaphthalene-1,2-diol + NAD<sup>+</sup>

#### 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.