

## ferredoxin-NAD<sup>+</sup> reductase

Cat. No. EXWM-1108

Lot. No. (See product label)

### Introduction

#### Description

Contains FAD. Reaction (1) is written for a [2Fe-2S] ferredoxin, which is characteristic of some mono- and dioxygenase systems. The alternative reaction (2) is written for a 2[4Fe-4S] ferredoxin, which transfers two electrons, and occurs in metabolism of anaerobic bacteria.

#### Synonyms

ferredoxin-nicotinamide adenine dinucleotide reductase; ferredoxin reductase (ambiguous); NAD<sup>+</sup>-ferredoxin reductase; NADH-ferredoxin oxidoreductase; reductase, reduced nicotinamide adenine dinucleotide-ferredoxin; ferredoxin-NAD<sup>+</sup> reductase; NADH-ferredoxin reductase; NADH<sub>2</sub>-ferredoxin oxidoreductase; NADH flavodoxin oxidoreductase; NADH-ferredoxin NAP reductase (component of naphthalene dioxygenase multicomponent enzyme system); ferredoxin-linked NAD<sup>+</sup> reductase; NADH-ferredoxin TOL reductase (component of toluene dioxygenase); ferredoxin-NAD reductase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.18.1.3

#### CAS No.

39369-37-4

#### Reaction

(1) 2 reduced [2Fe-2S] ferredoxin + NAD<sup>+</sup> + H<sup>+</sup> = 2 oxidized [2Fe-2S] ferredoxin + NADH; (2) reduced 2[4Fe-4S] ferredoxin + NAD<sup>+</sup> + H<sup>+</sup> = oxidized 2[4Fe-4S] ferredoxin + NADH

#### 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.