

hydroxylamine oxidase (cytochrome)

Cat. No. EXWM-1628

Lot. No. (See product label)

Introduction

Description

The enzyme from the heterotrophic nitrifying bacterium *Paracoccus denitrificans* contains three to five non-heme, non-iron-sulfur iron atoms and interacts with cytochrome c556 and pseudoazurin. Under anaerobic conditions in vitro only nitrous oxide is formed. Presumably nitroxyl is released and combines with a second nitroxyl to give nitrous oxide and water. When oxygen is present, nitrite is formed.

Synonyms

HAO (ambiguous); hydroxylamine oxidoreductase (ambiguous); hydroxylamine oxidase (misleading)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.7.3.6

CAS No.

9075-43-8

Reaction

hydroxylamine + O₂ = nitrite + H₂O + H⁺ (overall reaction); (1a) hydroxylamine + 2 ferricytochrome c = nitroxyl + 2 ferrocycytochrome c + 2 H⁺; (1b) nitroxyl + 2 ferrocycytochrome c + O₂ + H⁺ = nitrite + 2 ferricytochrome c + H₂O (spontaneous)

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.