Creative Enzymes®

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 ferrocytochrome c + 2 H+; (1b) nitroxyl + 2 ferrocytochrome 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.