Creative Enzymes®

nitronate monooxygenase

Cat. No. EXWM-0608

Lot. No. (See product label)

Introduction

Description	Previously classified as 2-nitropropane dioxygenase (EC 1.13.11.32), but it is now recognized that this was the result of the slow ionization of nitroalkanes to their nitronate (anionic) forms. The enzymes from the fungus Neurospora crassa and the yeast Williopsis saturnus var. mrakii (formerly classified as Hansenula mrakii) contain non-covalently bound FMN as the cofactor. Neither hydrogen peroxide nor superoxide were detected during enzyme turnover. Active towards linear alkyl nitronates of lengths between 2 and 6 carbon atoms and, with lower activity, towards propyl-2-nitronate. The enzyme from N. crassa can also utilize neutral nitroalkanes, but with lower activity.
Synonyms	NMO; 2-nitropropane dioxygenase (incorrect)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.13.12.16
Reaction	ethylnitronate + O2 = acetaldehyde + nitrite + other products
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 ℃.