Creative Enzymes®

D-arginine dehydrogenase

Cat. No. EXWM-1492

Lot. No. (See product label)

Introduction

Description	Contains a non-covalent FAD cofactor. The enzyme, which has been isolated from the bacterium Pseudomonas aeruginosa PAO1, is a catabolic enzyme that is part of a two-enzyme complex involved in the racemization of D and L-arginine. The enzyme has a broad substrate range and can act on most D-amino acids with the exception of D-glutamate and D-aspartate. However, activity is maximal with D-arginine and D-lysine. Not active on glycine.
Synonyms	D-amino-acid:(acceptor) oxidoreductase (deaminating); D-amino-acid dehydrogenase; D-amino-acid:acceptor oxidoreductase (deaminating)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.4.99.6
CAS No.	37205-44-0
Reaction	D-arginine + acceptor + H2O = 5-guanidino-2-oxopentanoate + NH3 + reduced acceptor (overall reaction); (1a) D-arginine + acceptor = iminoarginine + reduced acceptor; (1b) iminoarginine + H2O = 5-guanidino-2-oxopentanoate + NH3 (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 ℃.