Creative Enzymes®

opine dehydrogenase

Cat. No. EXWM-1510

Lot. No. (See product label)

Introduction

Description In the forward direction, the enzyme from Arthrobacter sp. acts also on secondary amine dicarboxylates such as N-(1-carboxyethyl)methionine and N-(1-carboxyethyl)phenylalanine. Dehydrogenation forms an imine, which dissociates to the amino acid and pyruvate. In the reverse direction, the enzyme acts also on neutral amino acids as an amino donor. They include L-amino acids such as 2-aminopentanoic acid, 2-aminobutyric acid, 2-aminohexanoic acid, 3-chloroalanine, O-acetylserine, methionine, isoleucine, valine, phenylalanine, leucine and alanine. The amino acceptors include 2-oxoacids such as pyruvate, oxaloacetate, glyoxylate and 2-oxobutyrate.

Synonyms (2S)-2-{[1-(R)-carboxyethyl]amino}pentanoate dehydrogenase (NAD+, L-aminopentanoate-forming)

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.5.1.28

CAS No. 108281-02-3

Reaction (2S)-2-{[1-(R)-carboxyethyl]amino}pentanoate + NAD+ + H2O = L-2-aminopentanoic acid + pyruvate + NADH + H+

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 ℃.