

Native Sporosarcina sp. L-Phenylalanine Dehydrogenase

Cat. No. NATE-0558

Lot. No. (See product label)

Introduction

Description

Phenylalanine dehydrogenase is a member of a large family of amino-acid dehydrogenases, which includes glutamate dehydrogenase, alanine dehydrogenase, leucine dehydrogenase, lysine ϵ -dehydrogenase, and meso-a, ϵ -diaminopimelate D-dehydrogenase. The three known gene sequences are octomers. It has a two-domain, three-dimensional structure.

Applications

L-Phenylalanine dehydrogenase is a NAD⁺-dependent oxidoreductase that catalyzes the reversible, oxidative deamination of L-phenylalanine which results in its degradation. L-Phenylalanine dehydrogenase is used to study phenylalanine metabolism and phenylalanine, tyrosine and tryptophan biosynthesis

Synonyms

phenylalanine dehydrogenase; EC 1.4.1.20; L-phenylalanine dehydrogenase; PHD; 69403-12-9

Product Information

Source

Sporosarcina sp.

Form

lyophilized powder

EC Number

EC 1.4.1.20

CAS No.

69403-12-9

Activity

> 6 units/mg solid

Unit Definition

One unit will oxidize 1.0 μ mole of L-phenylalanine per min at pH 10.5 at 30°C in the presence of β -NAD.

Storage and Shipping Information

Storage

–20°C