

1,6-dihydroxycyclohexa-2,4-diene-1-carboxylate dehydrogenase

Cat. No. EXWM-1299

Lot. No. (See product label)

Introduction

Description

This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-CH group of donor with NAD⁺ or NADP⁺ as acceptor. The systematic name of this enzyme class is (1R,6R)-1,6-dihydroxycyclohexa-2,4-diene-1-carboxylate:NAD⁺ oxidoreductase (decarboxylating). Other names in common use include 3,5-cyclohexadiene-1,2-diol-1-carboxylate dehydrogenase, 3,5-cyclohexadiene-1,2-diol-1-carboxylic acid dehydrogenase, dihydrodihydroxybenzoate dehydrogenase, DHBDH, cis-1,2-dihydroxycyclohexa-3,5-diene-1-carboxylate dehydrogenase, 2-hydro-1,2-dihydroxybenzoate dehydrogenase, cis-1,2-dihydroxycyclohexa-3,5-diene-1-carboxylate:NAD⁺, oxidoreductase, and dihydrodihydroxybenzoate dehydrogenase. This enzyme participates in benzoate degradation via hydroxylation and benzoate degradation via coa ligation.

Synonyms

3,5-cyclohexadiene-1,2-diol-1-carboxylate dehydrogenase; 3,5-cyclohexadiene-1,2-diol-1-carboxylic acid dehydrogenase; dihydrodihydroxybenzoate dehydrogenase; DHBDH; cis-1,2-dihydroxycyclohexa-3,5-diene-1-carboxylate dehydrogenase; 2-hydro-1,2-dihydroxybenzoate dehydrogenase; cis-1,2-dihydroxycyclohexa-3,5-diene-1-carboxylate:NAD⁺ oxidoreductase; dihydrodihydroxybenzoate dehydrogenase; (1R,6R)-1,6-dihydroxycyclohexa-2,4-diene-1-carboxylate:NAD⁺ oxidoreductase (decarboxylating)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.3.1.25

CAS No.

60496-16-4

Reaction

(1R,6S)-1,6-dihydroxycyclohexa-2,4-diene-1-carboxylate + NAD⁺ = catechol + CO₂ + 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.