Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.