

phenylacetyl-CoA dehydrogenase

Cat. No. EXWM-1094

Lot. No. (See product label)

Introduction

Description The enzyme from *Thauera aromatica* is a membrane-bound molybdenum-iron-sulfur protein. The enzyme is specific for phenylacetyl-CoA as substrate. Phenylacetate, acetyl-CoA, benzoyl-CoA, propanoyl-CoA, crotonyl-CoA, succinyl-CoA and 3-hydroxybenzoyl-CoA cannot act as substrates. The oxygen atom introduced into the product, phenylglyoxylyl-CoA, is derived from water and not molecular oxygen. Duroquinone, menaquinone and 2,6-dichlorophenolindophenol (DCPIP) can act as acceptor, but the likely physiological acceptor is ubiquinone. A second enzyme, EC 3.1.2.25, phenylacetyl-CoA hydrolase, converts the phenylglyoxylyl-CoA formed into phenylglyoxylate.

Synonyms phenylacetyl-CoA:acceptor oxidoreductase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.17.5.1

CAS No. 210756-43-7

Reaction phenylacetyl-CoA + H₂O + 2 quinone = phenylglyoxylyl-CoA + 2 quinol

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.