

## 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 + H<sub>2</sub>O + 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.