

## alcohol dehydrogenase (cytochrome c)

Cat. No. EXWM-0390

Lot. No. (See product label)

### Introduction

#### Description

A periplasmic PQQ-containing quinoprotein. Occurs in Pseudomonas and Rhodopseudomonas. The enzyme from Pseudomonas aeruginosa uses a specific inducible cytochrome c550 as electron acceptor. Acts on a wide range of primary and secondary alcohols, but not methanol. It has a homodimeric structure [contrasting with the heterotetrameric structure of EC 1.1.2.7, methanol dehydrogenase (cytochrome c)]. It is routinely assayed with phenazine methosulfate as electron acceptor. Activity is stimulated by ammonia or amines. Like all other quinoprotein alcohol dehydrogenases it has an 8-bladed 'propeller' structure, a calcium ion bound to the PQQ in the active site and an unusual disulfide ring structure in close proximity to the PQQ.

#### Synonyms

type I quinoprotein alcohol dehydrogenase; quinoprotein ethanol dehydrogenase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.1.2.8

#### Reaction

a primary alcohol + 2 ferricytochrome c = an aldehyde + 2 ferrocyanochrome c + 2 H<sup>+</sup>

#### 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.