

## pyruvate oxidase

Cat. No. EXWM-1210

Lot. No. (See product label)

### Introduction

#### Description

A flavoprotein (FAD) requiring thiamine diphosphate. Two reducing equivalents are transferred from the resonant carbanion/enamine forms of 2-hydroxyethyl-thiamine-diphosphate to the adjacent flavin cofactor, yielding 2-acetyl-thiamine diphosphate (AcThDP) and reduced flavin. FADH<sub>2</sub> is reoxidized by O<sub>2</sub> to yield H<sub>2</sub>O<sub>2</sub> and FAD and AcThDP is cleaved phosphorolytically to acetyl phosphate and thiamine diphosphate.

#### Synonyms

pyruvic oxidase; phosphate-dependent pyruvate oxidase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.2.3.3

#### CAS No.

9001-96-1

#### Reaction

pyruvate + phosphate + O<sub>2</sub> = acetyl phosphate + CO<sub>2</sub> + H<sub>2</sub>O<sub>2</sub>

#### 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.