Creative Enzymes®

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. FADH2 is reoxidized by O2 to yield H2O2 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 + O2 = acetyl phosphate + CO2 + H2O2

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 ℃.