Creative Enzymes®

Native Baker's yeast (S. cerevisiae) Pyruvate Decarboxylase

Cat. No. NATE-0510

Lot. No. (See product label)

Introduction

Description	Pyruvate decarboxylase (PDC) is a homotetrameric enzyme that catalyses the decarboxylation of pyruvic acid to acetaldehyde and carbon dioxide in the cytoplasm. Pyruvate decarboxylase depends on cofactors thiamine pyrophosphate (TPP) and magnesium. PDC contains a β-α-β structure, yielding parallel β-sheets.
Applications	Pyruvate decarboxylase (PDC) is used to study residues involved in thiamine pyrophosphate (TPP) binding. It is used to study the regulation of fermentation pathways in plant species.
Synonyms	Pyruvate decarboxylase; EC 4.1.1.1; α-carboxylase (ambiguous); pyruvic decarboxylase; α-ketoacid carboxylase; 2-oxo-acid carboxy-lyase; 9001-04-1; 2-Oxo-acid carboxy-lyase; PDC

Product Information

Source	Baker's yeast (S. cerevisiae)
Form	ammonium sulfate suspension; Suspension in 3.2 M (NH4)2SO4 pH 6.5, stabilized with 5% glycerol, 5 mM potassium phosphate, 1 mM magnesium acetate, 0.5 mM EDTA, and 25 µM c ocarboxylase.
EC Number	EC 4.1.1.1
CAS No.	9001-04-1
Activity	5.0-20.0 units/mg protein (biuret)
Unit Definition	One unit will convert 1.0 µmole of pyruvate to acetaldehyde per min at pH 6.0 at 25°C.

Storage and Shipping Information

Storage	2-8°C