

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 μ M α -carboxylase.

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 μ mole of pyruvate to acetaldehyde per min at pH 6.0 at 25°C.

Storage and Shipping Information

Storage

2-8°C