Creative Enzymes®

Native Porcine Citrate Synthase

Cat. No. NATE-0166

Lot. No. (See product label)

Introduction

Description Citrate synthase catalyses the conversion of Citrate to acetyl-CoA in the presence of coenzyme-A with the release of H2O and oxaloacetate. The enzyme has a molecular weight of 85 kDa and a pI of 6.1-6.6. It is inhibited by fluoroacetyl-CoA, palmitoyl-CoA, and citroyl-CoA. It is also inhibited when it is acetylated by acetic anhydride or iodinated by iodine.

Synonyms CS; EC 4.1.3.7; EC 2.3.3.1; 9027-96-7; Citrate (Si)-synthase; (R)-citric synthase; Citrate oxaloacetate-lyase [(pro-3S)-CH2COO-->acetyl-CoA]

Product Information

Species Porcine

Source Porcine heart

Form ammonium sulfate suspension. Suspension in 3.2 M (NH4)2SO4 solution, pH 7.0.

EC Number EC 4.1.3.7

CAS No. 9027-96-7

Activity > 100 units/mg protein

Buffer H2O: soluble 1.0 mg/mL, clear

Pathway 2-Oxocarboxylic acid metabolism, organism-specific biosystem; Biosynthesis of amino acids, conserved biosystem; Citrate cycle (TCA cycle), organism-specific biosystem

Function Citrate (Si)-synthase activity

Unit Definition One unit will form 1.0 µmole of Citrate from oxalacetate and acetyl CoA per min at pH 8.0 at 37°C.

Storage and Shipping Information

Storage 2-8°C