Creative Enzymes®

Protein Phosphatase-1 Catalytic Subunit, α-Isoform from rabbit, Recombinant

Cat. No. NATE-0614

Lot. No. (See product label)

Introduction

Description	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit is an enzyme that in humans is encoded by the PPP1CA gene. The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Synonyms	PPP1CA; protein phosphatase 1; PP-1A; PP1A; PP1alpha; PPP1A

Product Information

Species	Rabbit
Source	E. coli
Form	lyophilized powder
Molecular Weight	mol wt 37.5 kDa
Activity	5,000-15,000 units/mg protein
Buffer	Lyophilized powder containing imidazole buffer, pH 7.4, NaCl, DTT, EDTA, MnCl2, Tween 20, and trehalose as stabilizer.
Unit Definition	One unit will hydrolyze 1 nmole of p-nitrophenyl phosphate per min at pH 7.4 at 30°C.

Usage and Packaging

Package	Package size based on protein content.

Storage and Shipping Information

Stability	−20°C