

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