Creative Enzymes®

Native Bovine Protein Phosphatase 2C

Cat. No. NATE-0619

Lot. No. (See product label)

Introduction

Description	Protein Phosphatase 2C is a Mg2+-dependent serine/threonine protein phosphatase with a molecular mass of 42–45 kDa, involved in regulating numerous cellular processes. It is ubiquitously expressed and has been isolated from many mammalian tissues including liver, brain, skeletal muscle, retina, and blood platelets. There are two major isotypes associated with this enzyme, 2C1 and 2C2, also known as 2Ca and 2Cb, respectively. Both isozymes appear to be equally Mg2+-dependent and respond similarly to specific substrates. Both are monomers that demonstrate ~75% sequence homology. The molecular masses are similar; 44 kDa and 42 kDa for 2C1 and 2C2, respectively. Additional Type 2C serine/threonine protein phosphatases include 2Cg, 2Cd, Wip1, and NERPP2C, many of which have multiple isozyme members.
Synonyms	Protein Phosphatase 2C; PP2C

Product Information

Species	Bovine
Source	Bovine kidney
Form	buffered aqueous glycerol solution
Activity	~1000 units/mg protein
Buffer	Solution in 50 mM Tris-HCl, pH 7.0, containing 14 mM 2-mercaptoethanol, 1 mM benzamidine, 0.1 mM PMSF, 1 mM EDTA, and 50% glycerol
Unit Definition	One unit will release 1.0 nanomole of phosphate from 32P-labeled myelin basic protein at pH 7.0 at 30°C

Usage and Packaging

Package	vial of 1 µg

Storage and Shipping Information

Stability	−70°C