Creative Enzymes®

Native Bovine Protein Kinase A

Cat. No. NATE-1944

Lot. No. (See product label)

Introduction

Description	Protein Kinase A (PKA) catalyzes the transfer of the terminal phosphate of ATP to threonine or serine residues in a variety of protein substrates. The enzyme is composed of two subunit types: a catalytic subunit and a regulatory subunit. In the absence of cAMP, the two subunits are bound to each other and no catalysis can take place. In the presence of cAMP, the regulatory subunit binds cAMP, thus releasing the catalytic subunit.
Synonyms	Protein kinase A; PKA; Protein Kinase; 3',5'-cyclic-AMP-dependent Protein Kinase

Product Information

Species	Bovine
Source	Bovine heart
Form	Lyophilized from a solution containing: 5–10% potassium phosphate buffer, pH 7.5, 5–10% EDTA, and 80–90% protein (biuret assay).
EC Number	EC 2.7.11.11
CAS No.	9026-43-1
Activity	>0.4 units/μg protein
Unit Definition	One unit will transfer 1.0 picomole phosphate from γ-32P-ATP to hydrolyzed and partially dephosphorylated casein per min at pH 6.5 at 30 °C in the presence of cyclic AMP.

Usage and Packaging

Preparation Instructions	It is recommended that a 1 mg/ml or greater stock solution solution be prepared in water or 0.5 mM citrate buffer, pH 6.5, and stored in aliquots at –20 °C.

Storage and Shipping Information

Storage	Store the product at –20 °C. The dry solid is shipped at ambient temperature with minimal loss in activity. When stored at –20 °C with desiccant, the protein will lose <10% activity per year.