Creative Enzymes®

Native Wheat germ Acid Phosphatase

Cat. No. NATE-0084

Lot. No. (See product label)

Introduction

Description Acid phosphatases (APase) are a family of enzymes that non-specifically catalyze the hydrolysis of monoesters and anhydrides of phosphoric acid to produce inorganic phosphate at an optimum pH of 4 to 7. Acid phosphatase from potatoes is a 111 kDa diner consisting of two subunits at 41 and 35 kDa. This phosphatase has also been shown to cleave DNA.

Applications Acid phosphatase (APase) non-specifically catalyzes the hydrolysis of monoesters and anhydrides of phosphoric acid to produce inorganic phosphate. It is used to study the production, transport, and recycling of phosphate and the metabolic and energy transduction pr ocesses of the cell. This product is from wheat germ and has been used to determine the effect of phosphatase treatment on 3F3/2 staining.

Synonyms acid phosphatase; 9001-77-8; acid phosphomonoesterase; phosphomonoesterase; glycerophosphatase; acid monophosphatase; acid phosphohydrolase; acid phosphomonoester hydrolase; uteroferrin; acid nucleoside diphosphate phosphatase; orthophosphoric-monoester phosphohydrolase (acid optimum); EC 3.1.3.2; APase

Product Information

Source	Wheat germ
EC Number	EC 3.1.3.2
CAS No.	9001-77-8
Molecular Weight	58 kDa (gel filtration)
Activity	> 0.4 unit/mg solid
pH Stability	4.0–7.0
Optimum pH	5.7
Optimum temperature	45°C.
Unit Definition	One unit will hydrolyze 1.0 μmole of p-nitrophenyl phosphate per min at pH 4.8 at 37°C.

Storage and Shipping Information

Storage	−20°C