



Native Wheat germ Acid Phosphatase

Product Information

Cat#	NATE-0084
Abbr	APase, Native (Wheat germ)
Alias	APase
Similar	Apase
Source	Wheat germ
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 dimer 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 processes of the cell. This product is from wheat germ and has been used to determine the effect of phosphatase treatment on 3F3/2 staining.
Form	lyophilized powder
Enzyme Commission Number	EC 3.1.3.2
Activity	> 1 unit/mg
CAS No.	9001-77-8
Molecular Weight	58 kDa (gel filtration)
pH Stability	4.0–7.0
Unit Definition	One unit will hydrolyze 1.0 μ mole of p-nitrophenyl phosphate per min at pH 4.8 at 37°C.
Optimum pH	5.7



Creative Enzymes

Diagnostic Enzymes

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Optimum temperature	45°C.
Storage	-20°C
Warnings	Prepared essentially by method of Singer, T.P., J. Biol. Chem., 174, 11 (1948).
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