

## Native Wheat germ Acid Phosphatase

### Product Information

<b>Cat#</b>	NATE-0084
<b>Abbr</b>	APase, Native (Wheat germ)
<b>Alias</b>	APase
<b>Similar</b>	Apase
<b>Source</b>	Wheat germ
<b>Description</b>	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.
<b>Applications</b>	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.
<b>Form</b>	lyophilized powder
<b>Enzyme Commission Number</b>	EC 3.1.3.2
<b>Activity</b>	> 1 unit/mg
<b>CAS No.</b>	9001-77-8
<b>Molecular Weight</b>	58 kDa (gel filtration)
<b>pH Stability</b>	4.0–7.0
<b>Unit Definition</b>	One unit will hydrolyze 1.0 $\mu$ mole of p-nitrophenyl phosphate per min at pH 4.8 at 37°C.
<b>Optimum pH</b>	5.7

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