

## Native Chicken Alkaline phosphatase

Cat. No. NATE-0055

Lot. No. (See product label)

### Introduction

**Description** Alkaline phosphatase (ALP, ALKP, ALPase, Alk Phos) (EC 3.1.3.1) is a hydrolase enzyme responsible for removing phosphate groups from many types of molecules, including nucleotides, proteins, and alkaloids. The process of removing the phosphate group is called dephosphorylation. As the name suggests, alkaline phosphatases are most effective in an alkaline environment. It is sometimes used synonymously as basic phosphatase.

**Synonyms** Alkaline phosphatase; ALP; ALKP; ALPase; Alk Phos; EC 3.1.3.1; Alkaline phosphomonoesterase; Glycerophosphatase; Phosphomonoesterase

### Product Information

**Species** Chicken

**Source** Chicken Intestine.

**Form** dried powder

**EC Number** EC 3.1.3.1

**CAS No.** 9001-78-9

**Molecular Weight** 140 kDa

**Purity** Partially purified

**Activity** > 0.9 units per mg dry weight (25°C pH 8.8)

**Isoelectric point** 5.7.

**Optimum pH** 42225

**Composition** The enzyme is a zinc metallo-enzyme. Schüssler (1968) reports four isozymes. Chang and Moog (1972) found three isozymes in the enzyme from chicken duodenum.

**Activators** Schüssler (1968) indicates activation by Mg<sup>2+</sup>. See Sivanaesan et al. (1991).

**Inhibitors** Acidification to pH 4.5 reversibly inactivates the enzyme.

**Pathway** Folate biosynthesis, organism-specific biosystem; Folate biosynthesis, conserved biosystem; Metabolic pathways, organism-specific biosystem

**Unit Definition** One Unit hydrolyzes 1μmole of o-carboxyphenol phosphate per minute at 25°C, pH 8.8.

### Storage and Shipping Information

**Storage** Store at 2-8°C

**Stability** The lyophilized preparation is stable for 1-2 years at 2-8°C.

