

## Native Bovine Alkaline Phosphatase

Cat. No. NATE-1871

Lot. No. (See product label)

### Introduction

**Description** Alkaline phosphatases (APs) are highly ubiquitous enzymes, present in all species from bacteria to man. In humans, APs are encoded by a multi-gene family composed of four loci; i.e., tissue-nonspecific AP, also called bone/liver/kidney AP, intestinal. The sequence and complexity of the AP genes from other vertebrates and lower species are now being elucidated. The biological function of AP isozymes is still unknown. In vitro, the enzymes behave as phosphotransferases at neutral pH. The use of phosphate acceptor molecules (diethanolamine, tris, 2-amino-2-methyl-1-propanol) in the buffered substrate solutions increases the reaction rates and, thus, the sensitivity of assays based on AP determinations.

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

### Product Information

**Species** Bovine

**Source** Bovine Liver

**Form** Freeze-dried powder

**EC Number** EC 3.1.3.1

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

**Activity** 100 U/mg protein

**Solubility** Distilled water or dilute buffer

**Unit Definition** The amount of enzyme which liberates one micromole of p-nitrophenol from p-nitrophenyl-phosphate per minute at 37°C, pH 9.8 in diethanolamine buffer.

### Storage and Shipping Information

**Storage** Store at -20° C