



## Product Information Sheet

### **Polyclonal Anti-Alkaline Phosphatase, ALPL(Magnetic Bead Conjugate)**

**Catalogue No.** PA1004-M

**Lot No.** 03A01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, mouse, rat.

No cross reactivity with other proteins.

**Recommended application**

immunoprecipitation.(IP)

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminal of human ALPL, different from the related rat and mouse sequence by two amino acids.

**Purity**

Immunogen affinity purified.

**Contents**

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN<sub>3</sub>.

**Storage**

Store at 4°C for frequent use.

**Description**

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

### **BACKGROUND**

Alkaline phosphatase (ALPL) removes phosphate groups from the 5' end of DNA and RNA, and from proteins, at high pH. Most mammals have 4 different isozymes: placental, placental like, intestinal and non tissue specific (found in liver, kidney and bone). Tissues with particularly high concentrations of ALP include the liver, bile ducts, placenta, and bone. ALPL is the alkaline phosphatase of skin fibroblasts, the tissue-nonspecific type, and that it is active toward millimolar concentrations of the putative natural substrates phosphoethanolamine (PEA) and pyridoxal-5-prime-phosphate (PLP). ALPL gene exists in single copy in the haploid genome and is composed of 12 exons distributed over more than 50 kb. Damaged or diseased tissue releases enzymes into the blood, so serum ALP measurements can be abnormal in many conditions, including bone disease and liver disease.

### **REFERENCE**

1. Fedde, K. N.; Whyte, M. P. : Alkaline phosphatase (tissue-nonspecific isoenzyme) is a phosphoethanolamine and pyridoxal-5-prime-phosphate ectophosphatase: normal and hypophosphatasia fibroblast study. *Am. J. Hum. Genet.* 47: 767-775, 1990.
2. Weiss, M. J.; Cole, D. E. C.; Ray, K.; Whyte, M. P.; Lafferty, M. A.; Mulivor, R. A.; Harris, H. : A missense mutation in the human liver/bone/kidney alkaline phosphatase gene causing a lethal form of hypophosphatasia. *Proc. Nat. Acad. Sci.* 85: 7666-7669, 1988.

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**Contact:** Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email: [Info@antageneinc.com](mailto:Info@antageneinc.com)