Product Information Sheet

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

Catalogue No. PA1004-S

Lot No. 03A01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended Application

ImmunoPrecipitation

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.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN_3a_3 preservative.

Storage

Store at 4˚C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

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.

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