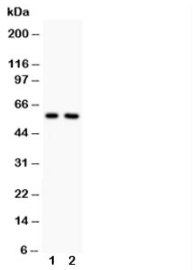
Alkaline Phosphatase Antibody (tissue-nonspecific) (R30170)

Catalog No.	Formulation	Size
R30170	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P08289
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Alkaline Phosphatase antibody is available for research use only.



Western blot testing of Alkaline Phosphatase antibody and Lane 1: rat heart; 2: rat brain. Predicted molecular weight ~57 kDa, but can be observed at up to ~75 kDa due to glycosylation.

Description

Alkaline phosphatase removes phosphate groups from the 5-prime 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.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Alkaline Phosphatase antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of rat ALPL (FVPEKEKDPSYWRQQ) was used as the immunogen for this tissue-nonspecific Alkaline Phosphatase antibody.

Storage

After reconstitution, the Alkaline Phosphatase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.