

BACKGROUND

There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2, while the tissue non-specific form is located on chromosome 1. ALPL (alkaline phosphatase, liver/bone/kidney) is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme.¹ The exact physiological function of the alkaline phosphatases is not known. A proposed function of this form of the enzyme is matrix mineralization; however, mice that lack a functional form of this enzyme show normal skeletal development. This enzyme has been linked directly to hypophosphatasia, a disorder that is characterized by hypercalcemia and includes skeletal defects. The character of this disorder can vary, however, depending on the specific mutation since this determines age of onset and severity of symptoms. Alternatively spliced transcript variants have been described.²

References:

- Harris, H.: Clinica Chimica Acta 186:133-50, 1990
- Benham, F.J. et al: Dev. Biol. 88:279-87, 1981

TECHNICAL INFORMATION

Source:

ALPL Antibody is a rabbit antibody raised against a short peptide from human ALPL sequence.

Specificity and Sensitivity:

This antibody detects endogenous levels of ALPL proteins without cross-reactivity with other family members.

Storage Buffer: PBS and 30% glycerol

Storage:

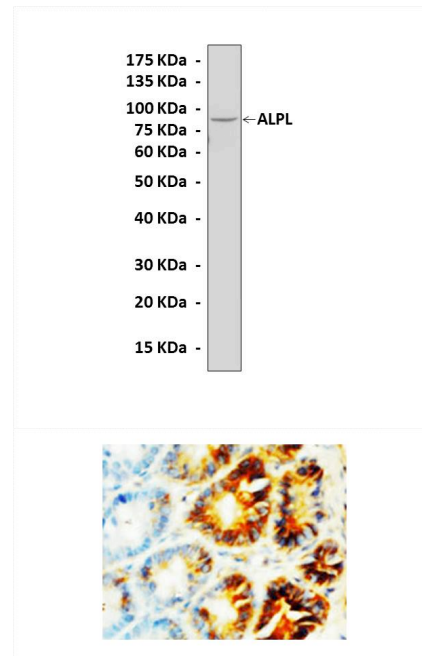
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	1:200
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Top: Western Blot detection of ALPL proteins in HeLa cell lysate using ALPL Antibody. **Bottom:** This antibody stains paraffin-embedded rat intestine tissue in immunohistochemical analysis.

