



# TNAP Polyclonal Antibody

|                           |   |
|---------------------------|---|
| <b>Catalog No</b>         | YP-Ab-15020   |
| <b>Isotype</b>            | IgG   |
| <b>Reactivity</b>         | Human;Mouse;Rat   |
| <b>Applications</b>       | WB;ELISA  |
| <b>Gene Name</b>          | ALPL  |
| <b>Protein Name</b>       | Alkaline phosphatase tissue-nonspecific isozyme   |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human ALPL. AA range:201-250  |
| <b>Specificity</b>        | TNAP Polyclonal Antibody detects endogenous levels of TNAP protein.   |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Source</b>             | Polyclonal, Rabbit,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.   |
| <b>Concentration</b>      | 1 mg/ml   |
| <b>Purity</b>             | ≥90%  |
| <b>Storage Stability</b>  | -20°C/1 year  |
| <b>Synonyms</b>           | ALPL; Alkaline phosphatase; tissue-nonspecific isozyme; AP-TNAP; TNSALP; Alkaline phosphatase liver/bone/kidney isozyme   |
| <b>Observed Band</b>      | 70kD  |
| <b>Cell Pathway</b>       | Cell membrane ; Lipid-anchor, GPI-anchor . Extracellular vesicle membrane ; Lipid-anchor, GPI-anchor . Mitochondrion membrane ; Lipid-anchor, GPI-anchor . Mitochondrion intermembrane space . Localizes to special class of extracellular vesicles, named matrix vesicles (MVs), which are released by osteogenic cells. Localizes to the mitochondria of thermogenic fat cells: tethered to mitochondrial membranes via a GPI-anchor and probably resides in the mitochondrion intermembrane space. .   |
| <b>Tissue Specificity</b> | Brain,Cerebellum,Liver,Lymphoma,Osteosarcoma,Peripheral nerve,Semin   |
| <b>Function</b>           | catalytic activity:A phosphate monoester + H(2)O = an alcohol + phosphate.,cofactor: Binds 1 magnesium ion.,cofactor: Binds 2 zinc ions.,disease: Defects in ALPL are a cause of hypophosphatasia adult type (hypophosphatasia) [MIM:146300].,disease: Defects in ALPL are a cause of hypophosphatasia childhood (hypophosphatasia) [MIM:241510].,disease: Defects in ALPL are a cause of hypophosphatasia infantile (hypophosphatasia) [MIM:241500]; an inherited metabolic bone disease characterized by defective skeletal mineralization. Four hypophosphatasia forms are distinguished, depending on the age of onset: perinatal, infantile, childhood and adult type. The |



perinatal form is the most severe and is almost always fatal. Patients with only premature loss of deciduous teeth, but with no bone disease are regarded as having odontohypophosphatasia (odonto).,function:This isozyme may play a role in skeletal mi

#### Background

This gene encodes a member of the alkaline phosphatase family of proteins. 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. The product of this gene 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. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature enzyme. This enzyme may play a role in bone mineralization. Mutations in this gene have been linked to hypophosphatasia, a disorder that is characterized by hypercalcemia and skeletal defects. [prov

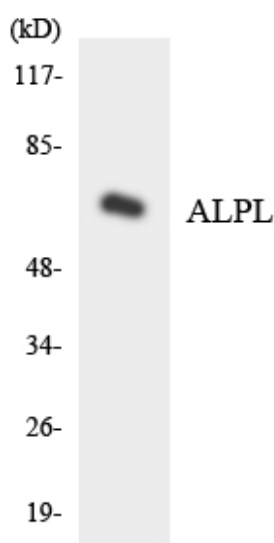
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of the lysates from Jurkat cells using ALPL antibody.