



TNAP Monoclonal Antibody

Catalog No	YP-mAb-15020
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ALPL
Protein Name	Alkaline phosphatase tissue-nonspecific isozyme
Immunogen	The antiserum was produced against synthesized peptide derived from human ALPL. AA range:201-250
Specificity	TNAP Monoclonal Antibody detects endogenous levels of TNAP protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ALPL; Alkaline phosphatase; tissue-nonspecific isozyme; AP-TNAP; TNSALP; Alkaline phosphatase liver/bone/kidney isozyme
Observed Band	70kD
Cell Pathway	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. .
Tissue Specificity	Brain,Cerebellum,Liver,Lymphoma,Osteosarcoma,Peripheral nerve,Semin
Function	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

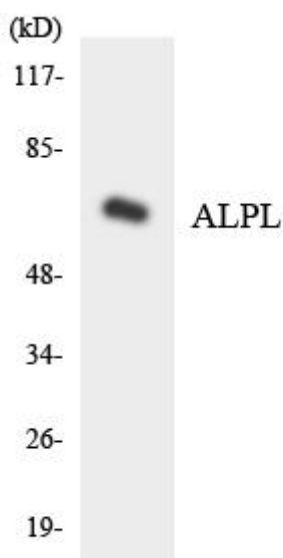
matters needing attention

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 various cells using TNAP Monoclonal Antibody