Recombinant Mouse Alkaline phosphatase,tissue-nonspecific isozyme/ALPL Protein

Catalog No.: RP01999

Sequence Information

Species
mouse

Gene ID
11647

Swiss Prot
P09242

Tags
C-6His

Synonyms
Alpl, Akp-2, Akp2,Alkaline phosphatase, tissue-nonspecific isozyme, AP-TNAP, TNAP, TNSALP, EC:3.1.3.1, Alkaline phosphatase 2, Alkaline phosphatase liver/bone/kidney isozyme, Phosphoamidase, Phosphocreatine phosphatase, EC: 3.9.1.1

Product Information

Source
HEK293 cells

Purification
≥ 90 % as determined by SDS-PAGE.

Calculated MW
54.26 KDa

Observed MW
66 -75kDa

Endotoxin
< 0.01 EU/μg of the protein by LAL method

Formulation
Lyophilized from a 0.2 μm filtered solution of 20mM HEPES, 150mM NaCl, 2mM MgSO4, 0.1mM ZnCl2, pH 7.5.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

Background

Several distinct genes encode alkaline phosphatases (APs) in mice with different tissue-specific expression patterns. The Alpl gene, also known as Akp2, encodes the liver/bone/kidney isozyme, also known as the tissue-nonspecific AP (TNAP). The Alpl gene is a key regulator of bone mineralization in mice . A variety of mutations in the human ALPL gene leads to different forms of hypophosphatasia, characterized by poorly mineralized cartilage and bones . The native ALPL is a glycosylated homodimer attached to the membrane through a GPI-anchor.

Basic Information

Description
Recombinant Mouse Alkaline phosphatase,tissue-nonspecific isozyme/ALPL Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Phe18-Ala500) of Mouse Alkaline phosphatase, tissue-nonspecific isozyme/ALPL (Accession #NP_001274101.1) fused with His at the C-terminus.

Activity
Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is >51590.2 pmol/min/μg, as measured under the described conditions.

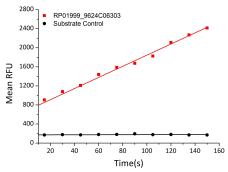
Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



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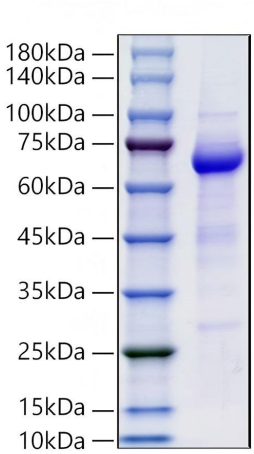

Recombinant Mouse Alkaline phosphatase,tissue-nonspecific isozyme/ALPL Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.