Catalog # ALL-H52H3



#### Synonym

AP-TNAP, APTNAP, HOPS, HPPA, HPPC, HPPI, HPPO, TNALP, TNAP, TNS-ALP, TNSALP

#### Source

Human ALPL Protein, His Tag(ALL-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 18 - Ser 502 (Accession # <u>P05186-1</u>).
Predicted N-terminus: Leu 18

# **Molecular Characterization**

ALPL(Leu 18 - Ser 502) P05186-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 55.3 kDa. The protein migrates as 65-70 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### Formulation

Supplied as 0.2 µm filtered solution in 20 mM Tris, 150 mM NaCl, 20% Glycerol, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.* 

#### Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

# **SDS-PAGE**



Human ALPL Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **SEC-MALS**



The purity of Human ALPL Protein, His Tag (Cat. No. ALL-H52H3) is more than 90% and the molecular weight of this protein is around 115-135 kDa verified by SEC-MALS. Report

# **Bioactivity-ELISA**



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# Human ALPL Protein, His Tag (active enzyme, MALS verified)

Catalog # ALL-H52H3





Immobilized Human ALPL Protein, His Tag (Cat. No. ALL-H52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind various dilution ratio of Anti-ALPL Polyclonal Antibody (QC tested).

#### Bioactivity

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is  $>80,000 \text{ pmol/min/}\mu g$  (QC tested).

#### 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.

# **Clinical and Translational Updates**

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.



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