TNSALP/ALPL Protein, Human (HEK 293, His)

Cat. No.:	HY-P7880
Synonyms:	rHuAlkaline phosphatase, tissue-nonspecific isozyme/ALPL, His; Alkaline Phosphatase; Tissue-Nonspecific Isozyme; AP-TNAP; TNSALP; Alkaline Phosphatase Liver/Bone/Kidney Isozyme; ALPL
Species:	Human
Source:	HEK 293
Accession:	P05186 (L18-S502)
Gene ID:	249
Molecular Weight:	65-90 kDa

PROPERTIES

AA Sequence	L V P E K E K D P K Y W R D Q A Q E T L K Y A L E L Q K L N T N V A K N V I M F L G D G M G V S T V T A A R I L K G Q L H H N P G E E T R L E M D K F P F V A L S K T Y N T N A Q V P D S A G T A T A Y L C G V K A N E G T V G V S A A T E R S R C N T T Q G N E V T S I L R W A K D A G K S V G I V T T T R V N H A T P S A A Y A H S A D R D W Y S D N E M P P E A L S Q G C K D I A Y Q L M H N I R D I D V I M G G G R K Y M Y P K N K T D V E Y E S D E K A R G T R L D G L D L V D T W K S F K P R Y K H S H F I W N R T E L L T L D P H N V D Y L L G L F E P G D M Q Y E L N R N N V T D P S L S E M V V V A I Q I L R K N P K G F F L L V E G G R I D H G H H E G K A K Q A L H E A V E M D R A I G Q A G S L T S S E D T L T V V T A D H S H V F T F G G Y T P R G N S I F G L A P M L S D T D K K P F T A I L Y G N G P G Y K V V G G E R E N V S M V D Y A H N N Y Q A Q S A V P L R H E T H G G E D V A V F S K G P M A H L L H G V H E Q N Y V P H V M A Y A A C I G A N L G H C A P A S S
Biological Activity	Data is not available.
Appearance	Solution
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM HEPES, 150 mM NaCl, 2 mM $MgSO_4$, 0.1 mM $ZnCl_2$, pH 7.5.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A
Storage & Stability	Stored at -80°C. It is stable at -20℃ for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	Hypophosphatasia is the inborn error of metabolism characterized by low serum alkaline phosphatase activity (hypophosphatasaemia). This biochemical hallmark reflects loss-of-function mutations within the gene that encodes the tissue-nonspecific isoenzyme of alkaline phosphatase (TNSALP). TNSALP is a cell-surface homodimeric phosphohydrolase that is richly expressed in the skeleton, liver, kidney and developing teeth. In hypophosphatasia, extracellular accumulation of TNSALP natural substrates includes inorganic pyrophosphate, an inhibitor of mineralization, which explains the dento-osseous and arthritic complications featuring tooth loss, rickets or osteomalacia, and calcific arthopathies[1].

REFERENCES

[1]. Michael P Whyte. Hypophosphatasia - aetiology, nosology, pathogenesis, diagnosis and treatment. Nat Rev Endocrinol. 2016 Apr;12(4):233-46.

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com