Recombinant Protein Technical Manual

Recombinant Human Alkaline Phosphatase/ALPL Protein (His Tag)

RPES2329

Product Data:

Product SKU: RPES2329

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P05186

Protein Information:

Molecular Mass: 54.5 kDa

AP Molecular Mass: 66 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.

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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Alkaline Phosphatase; Tissue-Nonspecific Isozyme; AP-TNAP; TNSALP; Alkaline Phosphatase Liver/Bone/Kidney Isozyme; ALPL;HOPS;TNAP

Immunogen Information:

Sequence: Leu18-Ser502

Background:

Alkaline Phosphatase, Tissue-Nonspecific Isozyme (ALPL) is a cell membrane protein which belongs to the alkaline phosphatase family. There are at least four distinct but related alkaline phosphatases in humans: intestinal AP (IAP), placental AP(PLAP), germ cell AP (GCAP) and their genes are clustered on chromosome 2, tissue-nonspecific isozyme (TNAP) which gene is located on chromosome 1. Alkaline phosphatases (APs) are dimeric enzymes, it catalyze the hydrolysis of phosphomonoesters with release of inorganic phosphate. The native ALPL is a glycosylated homodimer attached to the membrane through a GPI-anchor. This isozyme may play a role in skeletal mineralization. Mutations in ALPL gene have been linked directly to different forms of hypophosphatasia,characterized by poorly mineralized cartilage and bones, and this disorder can vary depending on the specific mutation since this determines age of onset and severity of symptoms.