

Human Alkaline phosphatase (Intestinal type) /ALPI Protein

Cat. No. APE-HM101

Description

Source	Recombinant Human Alkaline phosphatase (Intestinal type) /ALPI Protein is expressed from HEK293 with His tag and Flag tag at the N-Terminus. It contains Val20-Asp503.
Accession	P09923
Molecular Weight	The protein has a predicted MW of 54.5 kDa. Due to glycosylation, the protein migrates to 63-73 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

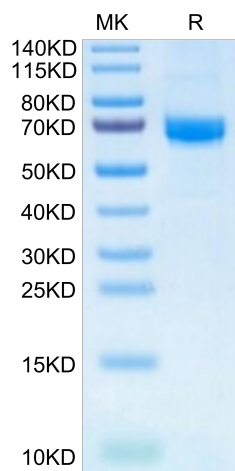
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Alkaline phosphatase can be considered "our favorite enzyme" for reasons apparent to those who diagnose and treat metabolic bone diseases or who study skeletal biology. Few might know, however, that alkaline phosphatase likely represents the most frequently assayed enzyme in all of medicine. Elevated activity in the circulation is universally recognized as a marker for skeletal or hepatobiliary disease.

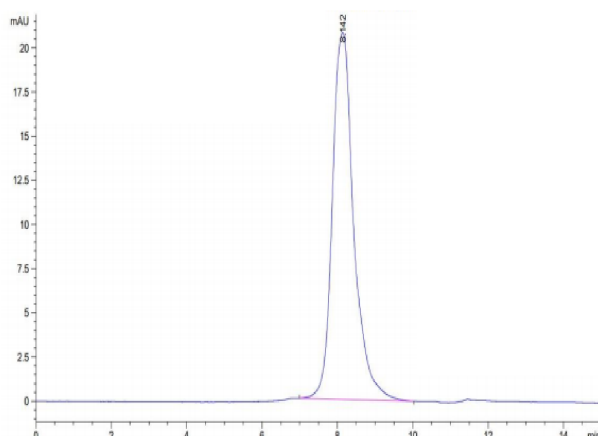
Assay Data

Bis-Tris PAGE



Human Alkaline phosphatase (Intestinal type) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

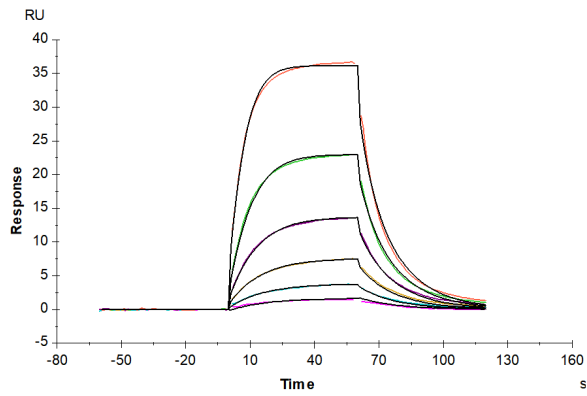
SEC-HPLC



The purity of Human Alkaline phosphatase (Intestinal type) is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Anti-Alkaline Phosphatase Antibody captured on CM5 Chip via Protein A can bind Human Alkaline phosphatase (Intestinal type) , His Tag with an affinity constant of 1.58 μ M as determined in SPR assay (Biacore T200).

Bioactivity Data

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is > 3000 pmol/min/ μ g.