

Human Alkaline Phosphatase (Placental type) /ALPP Protein



Cat. No. APE-HM202

Description	
Source	Recombinant Human Alkaline Phosphatase (Placental type) /ALPP Protein is expressed from HEK293 with hFc (IgG1) tag at the C-terminus. It contains Ile23-Asp506.
Accession	P05187
Molecular Weight	The protein has a predicted MW of 78.69 kDa. Due to glycosylation, the protein migrates to 85-105 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU 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 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
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.

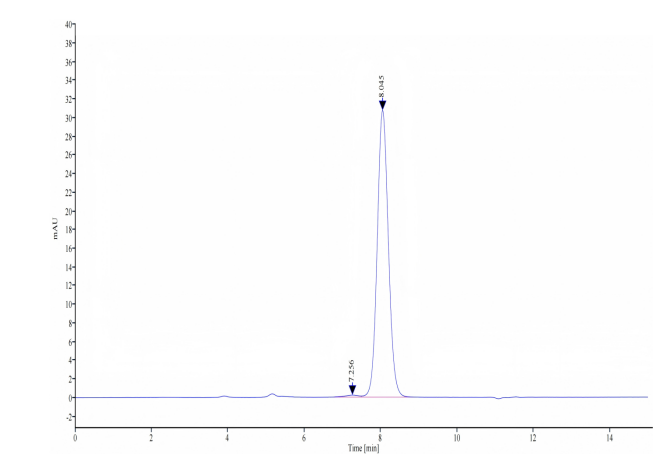
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



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

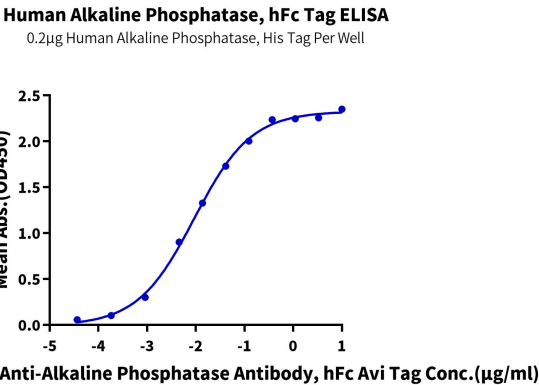
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Assay Data

ELISA Data



Immobilized Human Alkaline Phosphatase, hFc Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-Alkaline Phosphatase Antibody, hFc Avi Tag with the EC50 of 9.3ng/ml determined by ELISA.

Bioactivity Data

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is > 15000 pmol/min/µg.