

# Human Alkaline Phosphatase (Placental type) /ALPP Protein

Cat. No. APE-HM102

## Description

<b>Source</b>	Recombinant Human Alkaline Phosphatase (Placental type) /ALPP Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ile23-Asp506.
<b>Accession</b>	P05187
<b>Molecular Weight</b>	The protein has a predicted MW of 53.8 kDa. Due to glycosylation, the protein migrates to 63-68 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per ug by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE; > 95% as determined by HPLC

## Formulation and Storage

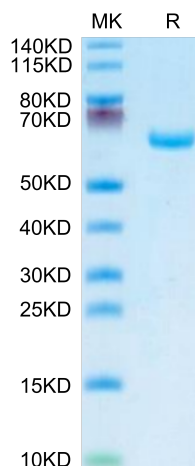
<b>Formulation</b>	Supplied as 0.22 $\mu$ m filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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.

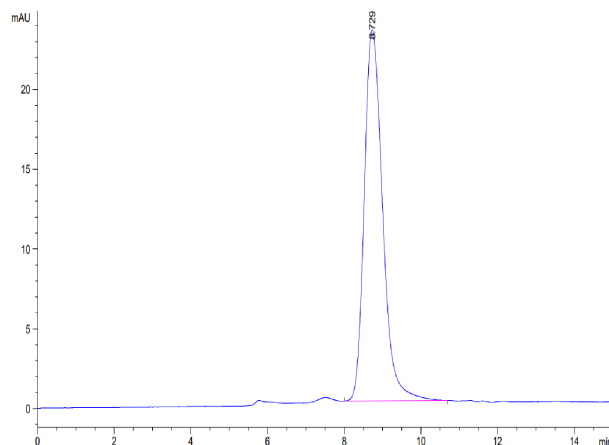
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



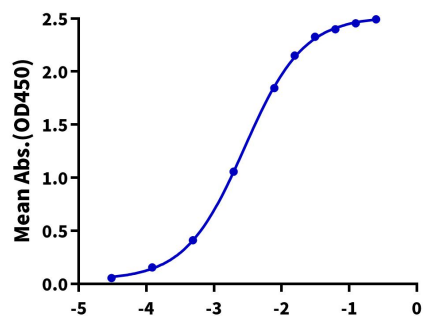
The purity of Human Alkaline Phosphatase (Placental type) is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human Alkaline Phosphatase, His Tag ELISA**

0.1µg Human Alkaline Phosphatase, His Tag Per Well



Immobilized Human Alkaline Phosphatase (Placental type), His Tag at 1µg/ml (100 µl/Well) on the plate. Dose response curve for Anti-Alkaline Phosphatase Antibody, hFc Tag with the EC50 of 2.8ng/ml determined by ELISA.

Log Anti-Alkaline Phosphatase Antibody, hFc Tag Conc. (µg/ml)

**Bioactivity Data**

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is > 12000 pmol/min/µg.