

## 37-1110: Human Alkaline Phosphatase / ALPL Recombinant Protein (His Tag)(Discontinued)

**Reactivity :** Human

**Alternative Name :** AP-TNAP Protein, APTNAP Protein, HOPS Protein, TNAP Protein, TNSALP Protein,

### Description

#### Source : HEK293 Cells

Alkaline phosphatase (ALPL) is a hydrolase enzyme responsible for removing phosphate groups from many types of molecules, including nucleotides, proteins, and alkaloids. The process of removing the phosphate group is called dephosphorylation. As the name suggests, alkaline phosphatases are most effective in an alkaline environment. It is sometimes used synonymously as basic phosphatase. Alkaline phosphatases (APs) are ubiquitous in many species, from bacteria to human. Four genes encode AP isoenzymes in humans and rodents. Three AP genes are expressed in a tissue-specific manner (i.e., placental, embryonic, and intestinal AP isoenzymes). Expression of the fourth AP gene is nonspecific to a single tissue and is especially abundant in bone, liver, and kidney. This isoenzyme is also called tissue-nonspecific alkaline phosphatase (TNAP). The enzyme tissue non-specific alkaline phosphatase (TNAP) belongs to the ectophosphatase family. TNAP is present in large amounts in bone in which it plays a role in mineralization.

### Product Info

**Amount :** Human Alkaline Phosphatase / ALPL Recombinant Protein (His Tag)(Discontinued) / 20 µg

**Purification :** > 95 % as determined by SDS-PAGE

**Content :** Formulation Lyophilized from sterile PBS, pH 7.4  
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

**Storage condition :** Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

**Amino Acid :** Met1-Ser502

### Application Note

Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl phosphate (4-MUP). The specific activity is > 50, 000 pmoles/min/µg.

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

Other pack size also available.

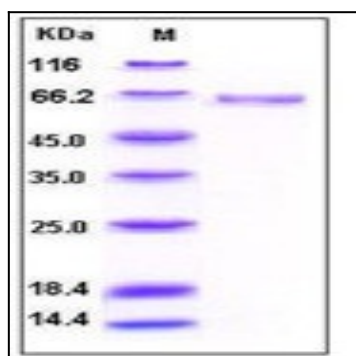


Fig 1: Human Alkaline Phosphatase / ALPL Recombinant Protein (His Tag)