

HUMAN ALPP PROTEIN, HIS TAG**Cat.#:** 11900**Product Name:** Human ALPP Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** ALP;ALPI;IAP;PALP;PLAP;PLAP-1**Target:** ALPP**UNIPROT ID:** P05187**Description:** Recombinant Human ALPP Protein with C-terminal 6xHis tag

Background: The protein encoded by this gene is an alkaline phosphatase, a metalloenzyme that catalyzes the hydrolysis of phosphoric acid monoesters. It belongs to a multigene family composed of four alkaline phosphatase isoenzymes. The enzyme functions as a homodimer and has a catalytic site containing one magnesium and two zinc ions, which are required for its enzymatic function. One of the main sources of this enzyme is the liver, and thus, it's one of several indicators of liver injury in different clinical conditions. In pregnant women, this protein is primarily expressed in placental and endometrial tissue, however, strong ectopic expression has been detected in ovarian adenocarcinoma, serous cystadenocarcinoma, and other ovarian cancer cells. [provided by RefSeq, Aug 2020]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 53.5 kDa after removal of the signal peptide. The apparent molecular mass of ALPP-His is approximately 55–70 kDa due to glycosylation.

Molecular Characterization: ALPP(Ile23–Thr505) 6×His tag

Purity: The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at –20°C to –80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at –80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human ALPP Protein, His Tag on SDS-PAGE under reducing condition.