

## 32-6675: ALPP Human, Active

**Application :** Functional Assay

**Alternative Name :** 3 ALPP, Alkaline phosphatase Regan isozyme, Placental alkaline phosphatase 1, PLAP-1, ALP, PLAP, Alkaline phosphatase placental type, EC 3.1.3.1, PLAP-1, Alkaline phosphatase Regan isozyme.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Placental alkaline phosphatase also known as PLAP is a membranal sialoglycoprotein enzyme typically found in high concentration in syncytiotrophoblasts in the placenta amid the 3th trimester of gestation. The expression of PLAP was at first considered to be only in the term placenta, though, a human PLAP-like variant has been found, that has more than 85% homology with PLAP itself. PLAP is expressed strictly in normal term placenta, endocervix & fallopian tube and in ovarian and proximal gastrointestinal tumors. It is also widely expressed in germ cell tumors and more recently found in seminomas. ALPP Human produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 494 amino acids (23-506 a.a.) and having a molecular mass of 53.9kDa. ALPP is expressed with a 10 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** ALPP protein solution (0.5mg/ml) containing Phosphate-Buffered Saline (pH 7.4) and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** ADLMIPVEE ENPDFWNREA AEALGAAKKL QPAQTAANKL IIFLGDGMGV STVTAARILK GQKKDKLGPE  
LPLAMDRFPY VALSKTYNVD KHVPDSGATA TAYLCGVKGN FQTIGLSAAA RFNQCNTTRG NEVISVMNRA  
KKAGKSVG VV TTTRVQHASP AGTYAHTVNR NWYSDADVPA SARQEGCQDI ATQLISNMDI DVILGGGRKY  
MFRMGTPDPE YPDDYSQGGT RLDGKNLVQE WLAKRQGARY VWNRTLMQA SLDPSVTHLM  
GLFEPGDMKY EIHRDSTLDP SLMEMTEAAL RLLSRNPRGF FLFVEGGRID HGHESRAYR ALTETIMFDD  
AIERAGQLTS EEDTSLVTA DSHVFSFGG YPLRGSSIFG LAPGKARDRK AYTLLYGNG PGYVLKDGAR  
PDVTESESGS PEYRQSAVP LDEETHAGED VAVFARGPQA HLVHGVQEQT FIAHVMAFAA CLEPYTACDL  
APPAGTTDHH HHHH.

### Application Note

Specific activity is > 2,500 unit/mg, and is defined as the amount of enzyme that hydrolyze 1.0nmole of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37°C.