

## 32-6643: ACP Mouse

**Application :** Functional Assay

**Alternative Name :** acid phosphatase, prostate, ACP3, ACP-3, ACP, EC 3.1.3.2, PAP, Prostatic Acid Phosphatase, prostatic acid phosphatase, 5-nucleotidase, 5'-NT, Acid phosphatase 3, Ecto-5'-nucleotidase, Fluoride-resistant acid phosphatase, FRAP, Thiamine monophosphatase, TMPase, A030005E02Rik, Lap, PAP, Ppal.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Prostatic Acid Phosphatase or ACP is part of a family of proteins called histidine acid phosphatase. ACP enhances the hydrolyzation of many phosphate monoesters and proteins that are phosphorylated. In order to function best, ACP needs a range of range of 4-6 pH, furthermore, L(+)-tartrate inhibits ACP's catalyzation. This enzyme can act as a lipid phosphatase as well and can inhibit lysophosphatidic acid in seminal plasma.

ACP Mouse produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 356 amino acids (32-381 aa) and having a molecular mass of 41.3kDa. ACP is fused to a 6 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 :** The ACP solution (0.5mg/ml) contains 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).

**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 :** KELKFVTLVF RHGDRGPIET FPTDPITSS WPQGFGQLTQ WGMEQHYELG SYIRKRYGRF LNDTYKHDQI YIRSTDVEDRT LMSAMTNLAA LFPPEGISIW NPRLWQPIV VHTVSLSEDR LLYLPFRDCP RFEELKSETL ESEEFKRLH PYKSFLDTLS SLGSFDDQDL FGIWSKVYDP LFCESVHNFT LPSWATEDAM IKLKELSELS LLSLYGIHKQ KEKSRLQGGV LVNEILKNMK LATQPQKYKK LVMYSAHDTT VSLQMALDV YNGVLPPYAS CHMMELYHDK GGHFVEMYR NETQNEPYPL TLPGCTHSCP LEKFAELLDV VISQDWATEC MATSSHQGRN HHHHHH.

### Application Note

Specific activity is >80,000 unit/mg, and is defined as the amount of enzyme that hydrolyze 1.0nmole of p-nitrophenyl phosphate (pNPP) per minute at pH 5.0 at 37°C.