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# Recombinant Mouse Prostatic Acid Phosphatase Protein(Fc Tag)

Catalog Number: PDMM100101

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### Description

**Species** Mouse

Source Mammalian-derived Mouse Prostatic Acid Phosphatase/ACPP proteins Met1-Asn38

1, with an C-terminal Fc

Calculated MW 66.8 kDa
Observed MW 80 kDa
Accession Q8CE08

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 90% as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU/mg of the protein as determined by the LAL method

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

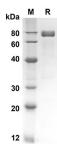
ShippingThis product is provided as lyophilized powder which is shipped with ice packs.FormulationLyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Mouse Prostatic Acid Phosphatase/PPAP proteins, 2 µg/lane of Recombinant Mouse Prostatic Acid Phosphatase/PPAP proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 66.8KD

#### Background

# Elabscience®

## Elabscience Biotechnology Co., Ltd.

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ACPP (Acid phosphatase, prostate, also PAP and ACP3) is a 48-52 kDa glycoprotein member of the histidine acid phosphatase family of enzymes. It exists as a 95-100 kDa nondisulfide-linked homodimer that hydrolyzes phosphate esters under low pH to generate free phosphate. ACPP is expressed by prostate epithelium and pain-detecting spinal cord neurons. In the spinal cord, ACPP dephosphorylates AMP. This generates adenosine which acts as a strong analgesic agent. Mature Human ACPP is 354 amino acids (aa) in length (aa 33-386). It contains one histidine phosphatase domain (aa 34-332), plus a nucleophile acceptor site at His44, and a proton donor site at Asp290. There are two potential alternative splice variants. One shows a deletion of aa 153-185, while another is transmembrane (previously called TMPase) and shows a 38 aa substitution for the C-terminal seven amino acids. Over aa 33-379, Human ACPP shares 84% aa identity with an Mouse ACPP.