

# Recombinant Mouse Prostatic Acid Phosphatase Protein (Fc Tag)

RPES8438



## Product Information

<b>Product SKU:</b> RPES8438	<b>Expression Host:</b> Mammalian	<b>Size:</b> 20µg
<b>Tag:</b> C-Fc	<b>Reactivity:</b> Mouse	<b>Accession:</b> Q8CE08

## Additional Information

<b>Calculated MW:</b> 66.8 kDa	<b>Observed MW:</b> 80 kDa
<b>Sequence:</b> Met1-Asn381aa	

## Protein Information

**Background:** 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.

**Synonyms:** 5'-NT, 5'-nucleotidase, Acid phosphatase prostate, ACP 3, ACP3, acpP, Ecto-5'-nucleotidase, PAP, PPAP, Prostatic acid phosphatase, Prostatic acid phosphotase, Thiamine monophosphatase, TMPase

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

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

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

**Bio-Activity:** Not validated for activity

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**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.