

## Datasheet for ABIN306667 **anti-ACP1 antibody**



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### Overview

Quantity:	100 µg
Target:	ACP1
Reactivity:	Human, Rat, Mouse, Cow
Host:	Sheep
Clonality:	Polyclonal
Conjugate:	This ACP1 antibody is un-conjugated
Application:	Western Blotting (WB)

### Product Details

Isotype:	IgG
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### Target Details

Target:	ACP1
Alternative Name:	LMWPTP (HCPTP) ( <a href="#">ACP1 Products</a> )
Background:	<p>Low molecular weight protein tyrosine phosphatases, including the human red cell phosphatase, HCPTP, are widely expressed cytosolic proteins of approximately 18kDa that exist in distinct isoforms and are highly selective for phosphotyrosine over phosphoserine or phosphothreonine. The HCPTP-A and HCPTP-B proteins expressed in human red cells and placenta are fast and slow forms of red cell acid phosphatase<sup>5</sup>. Like other tyrosine phosphatases, HCPTP is sensitive to inhibition by vanadate, and has a catalytic mechanism that involves formation of a cystinyl-phosphate intermediate<sup>6</sup>. The crystal structure of the bovine heart derived enzyme BHPTP shows a four-stranded central parallel β sheet with flanking α helices and an active site cysteine</p>

Target Details

residue in the typical tyrosine phosphatase sequence context, CXXXXXR. Biological actions and cellular substrates have not been fully elucidated. It is expressed in a wide range of cell types, and structural homologues are expressed in yeast. A catalytically inactive LMW-PTP functions to promote cell division and binds to tyrosine-phosphorylated PDGF receptors<sup>1</sup>. The HCPTPA isoform interacts with receptor tyrosine kinases, EphB1 and VEGFR2 (flk-1)<sup>2,4</sup>. Its overexpression inhibits VEGF-induced endothelial proliferation and migration, and its recruitment to EphB1 complexes is crucial to downstream signaling between EphB1 and integrins that mediate cell-matrix attachment<sup>3</sup>. Synonyms: lmwPTP, sheep anti human low molecular weight protein tyrosine phosphatase, Human Red Cell Protein Tyrosine phosphatase.

UniProt: [P24666](#)

Application Details

Application Notes: Antibody can be used for Western blotting and immunoprecipitation (1-10ug/ml.

Restrictions: For Research Use only

Handling

Concentration: 1 mg/ml

Storage: -20 °C