

**MIPP Polyclonal Antibody**  
**Catalog # AP70950****Specification****MIPP Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q9UNW1</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**MIPP Polyclonal Antibody - Additional Information****Gene ID** 9562**Other Names**

MINPP1; MIPP; Multiple inositol polyphosphate phosphatase 1; 2; 3-bisphosphoglycerate 3-phosphatase; 2, 3-BPG phosphatase; Inositol; 1, 3, 4, 5)-tetrakisphosphate 3-phosphatase; Ins(1, 3, 4, 5)P(4) 3-phosphatase

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.  
IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**MIPP Polyclonal Antibody - Protein Information****Name** MINPP1 ([HGNC:7102](#))**Function**

Multiple inositol polyphosphate phosphatase that hydrolyzes 1D-myo-inositol 1,3,4,5,6-pentakisphosphate (InsP5[2OH]) and 1D-myo- inositol hexakisphosphate (InsP6) to a range of less phosphorylated inositol phosphates. This regulates the availability of these various small molecule second messengers and metal chelators which control many aspects of cell physiology (PubMed:<a href="http://www.uniprot.org/citations/33257696" target="\_blank">33257696</a>, PubMed:<a href="http://www.uniprot.org/citations/36589890" target="\_blank">36589890</a>). Has a weak in vitro activity towards 1D-myo-inositol 1,4,5-trisphosphate which is unlikely to be physiologically relevant (PubMed:<a href="http://www.uniprot.org/citations/36589890" target="\_blank">36589890</a>). By regulating intracellular inositol polyphosphates pools, which act as metal chelators, it may control the availability of intracellular calcium and iron, which are important for proper neuronal development and homeostasis (PubMed:<a href="http://www.uniprot.org/citations/33257696" target="\_blank">33257696</a>)

target="\_blank">33257696</a>). May have a dual substrate specificity, and function as a 2,3-bisphosphoglycerate 3-phosphatase hydrolyzing 2,3-bisphosphoglycerate to 2-phosphoglycerate. 2,3- bisphosphoglycerate (BPG) is formed as part of the Rapoport-Luebering glycolytic bypass and is a regulator of systemic oxygen homeostasis as the major allosteric effector of hemoglobin (PubMed:<a href="http://www.uniprot.org/citations/18413611" target="\_blank">18413611</a>).

#### Cellular Location

Endoplasmic reticulum lumen {ECO:0000250|UniProtKB:O35217}. Secreted Cell membrane {ECO:0000250|UniProtKB:Q9Z2L6}. Note=Also associated with the plasma membrane in erythrocytes. {ECO:0000250|UniProtKB:Q9Z2L6}

#### Tissue Location

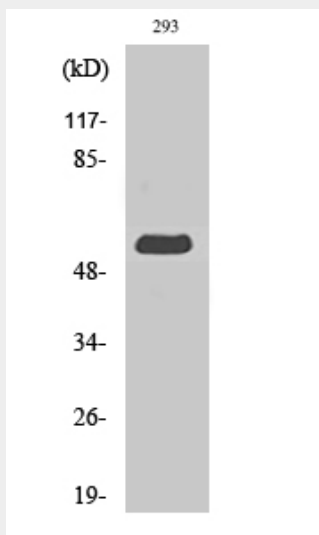
Widely expressed with highest levels in kidney, liver, cerebellum and placenta.

### MIPP Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### MIPP Polyclonal Antibody - Images



### MIPP Polyclonal Antibody - Background

Acts as a phosphoinositide 5- and phosphoinositide 6- phosphatase and regulates cellular levels of inositol pentakisphosphate (InsP5) and inositol hexakisphosphate (InsP6). Also acts as a 2,3-bisphosphoglycerate 3-phosphatase, by mediating the dephosphorylation of

2,3-bisphosphoglycerate (2,3-BPG) to produce phospho-D-glycerate without formation of 3-phosphoglycerate. May play a role in bone development (endochondral ossification). May play a role in the transition of chondrocytes from proliferation to hypertrophy (By similarity).