

**SHP1 Rabbit mAb**  
Catalog # AP76080**Specification****SHP1 Rabbit mAb - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P29350</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>67561</b>

**SHP1 Rabbit mAb - Additional Information****Gene ID** 5777**Other Names**  
PTPN6**Dilution**  
WB~~1/500-1/1000  
IHC~~1/50-1/100**Format**  
Liquid**SHP1 Rabbit mAb - Protein Information****Name** PTPN6**Synonyms** HCP, PTP1C**Function**

Tyrosine phosphatase enzyme that plays important roles in controlling immune signaling pathways and fundamental physiological processes such as hematopoiesis (PubMed:[29925997](http://www.uniprot.org/citations/29925997)). Dephosphorylates and negatively regulate several receptor tyrosine kinases (RTKs) such as EGFR, PDGFR and FGFR, thereby modulating their signaling activities (PubMed:[9733788](http://www.uniprot.org/citations/9733788), PubMed:[21258366](http://www.uniprot.org/citations/21258366)). When recruited to immunoreceptor tyrosine-based inhibitory motif (ITIM)-containing receptors such as immunoglobulin-like transcript 2/LILRB1, programmed cell death protein 1/PDCD1, CD3D, CD22 and other receptors involved in immune regulation, initiates their dephosphorylation and subsequently inhibits downstream signaling events (PubMed:[11907092](http://www.uniprot.org/citations/11907092), PubMed:[37932456](http://www.uniprot.org/citations/37932456), PubMed:[38166031](http://www.uniprot.org/citations/38166031)). Modulates the signaling of several cytokine receptors including IL-4 receptor (PubMed:

<http://www.uniprot.org/citations/9065461> target="\_blank">9065461</a>). Additionally, targets multiple cytoplasmic signaling molecules including STING1, LCK or STAT1 among others involved in diverse cellular processes including modulation of T-cell activation or cGAS-STING signaling (PubMed:<a href="http://www.uniprot.org/citations/34811497" target="\_blank">34811497</a>, PubMed:<a href="http://www.uniprot.org/citations/38532423" target="\_blank">38532423</a>). Within the nucleus, negatively regulates the activity of some transcription factors such as NFAT5 via direct dephosphorylation. Acts also as a key transcriptional regulator of hepatic gluconeogenesis by controlling recruitment of RNA polymerase II to the PCK1 promoter together with STAT5A (PubMed:<a href="http://www.uniprot.org/citations/37595871" target="\_blank">37595871</a>).

### Cellular Location

Cytoplasm. Nucleus Note=In neurons, translocates into the nucleus after treatment with angiotensin II (By similarity). Shuttles between the cytoplasm and nucleus via its association with PDPK1.

### Tissue Location

Isoform 1 is expressed in hematopoietic cells. Isoform 2 is expressed in non-hematopoietic cells

## SHP1 Rabbit mAb - 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](#)

## SHP1 Rabbit mAb - Images



