

**SHP1 Rabbit mAb**  
**Catalog # AP76080****Specification**

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**SHP1 Rabbit mAb - Product Information**

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

**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:<a href="http://www.uniprot.org/citations/14739280" target="\_blank">14739280</a>, PubMed:<a href="http://www.uniprot.org/citations/29925997" target="\_blank">29925997</a>). Dephosphorylates and negatively regulate several receptor tyrosine kinases (RTKs) such as EGFR, PDGFR and FGFR, thereby modulating their signaling activities (PubMed:<a href="http://www.uniprot.org/citations/21258366" target="\_blank">21258366</a>, PubMed:<a href="http://www.uniprot.org/citations/9733788" target="\_blank">9733788</a>). 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, CLEC12A and other receptors involved in immune regulation, initiates their dephosphorylation and subsequently inhibits downstream signaling events (PubMed:<a href="http://www.uniprot.org/citations/11907092" target="\_blank">11907092</a>, PubMed:<a href="http://www.uniprot.org/citations/14739280" target="\_blank">14739280</a>, PubMed:<a href="http://www.uniprot.org/citations/37932456" target="\_blank">37932456</a>, PubMed:<a href="http://www.uniprot.org/citations/14739280" target="\_blank">14739280</a>).

[38166031](http://www.uniprot.org/citations/38166031)). Modulates the signaling of several cytokine receptors including IL-4 receptor (PubMed: [9065461](http://www.uniprot.org/citations/9065461)). 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: [34811497](http://www.uniprot.org/citations/34811497), PubMed: [38532423](http://www.uniprot.org/citations/38532423)). 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: [37595871](http://www.uniprot.org/citations/37595871)).

### 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



