

SHP1 Rabbit mAb
Catalog # AP76081**Specification****SHP1 Rabbit mAb - Product Information**

Application	WB
Primary Accession	P29350
Reactivity	Human, Mouse, Rat
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

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:[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, PubMed: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).

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



