

**Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody**  
**Catalog # ABO13362****Specification**

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**Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P29350</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

**Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 5777

**Other Names**

Tyrosine-protein phosphatase non-receptor type 6, 3.1.3.48, Hematopoietic cell protein-tyrosine phosphatase, Protein-tyrosine phosphatase 1C, PTP-1C, Protein-tyrosine phosphatase SHP-1, SH-PTP1, PTPN6, HCP, PTP1C

**Calculated MW**

67561 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200

**Subcellular Localization**

Cytoplasm. Nucleus. 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 Specificity**

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

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human SHP1

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term**

**storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## **Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - 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/38166031" target="\_blank">38166031</a>). Modulates the signaling of several cytokine receptors including IL-4 receptor (PubMed:<a href="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. Also acts 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

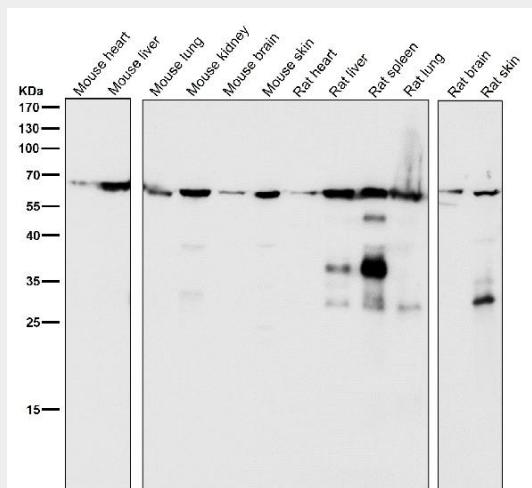
## **Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Protocols**

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

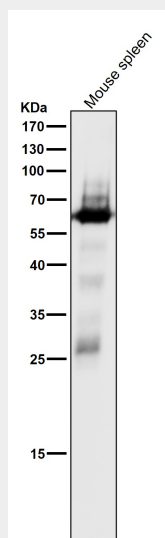
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

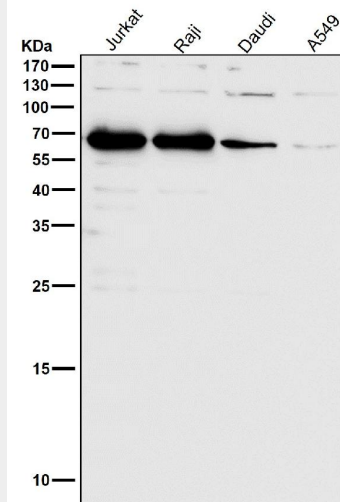
## Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Images



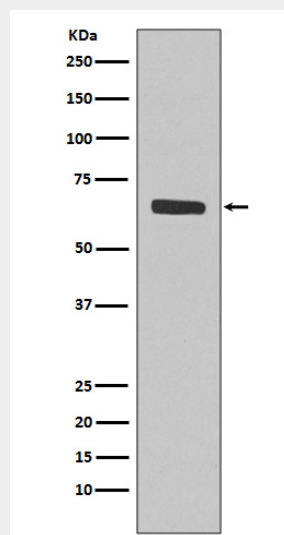
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



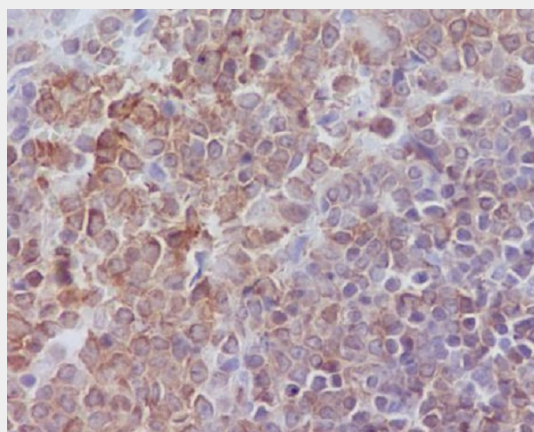
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of SHP1 expression in Jurkat cell lysate.



Immunohistochemical analysis of paraffin-embedded rat spleen, using SHP1 Antibody.