

Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody
Catalog # ABO13362

Specification

Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC
Primary Accession	P29350
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
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:29925997). Dephosphorylates and negatively regulate several receptor tyrosine kinases (RTKs) such as EGFR, PDGFR and FGFR, thereby modulating their signaling activities (PubMed:9733788, PubMed: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, PubMed:37932456, PubMed:38166031). Modulates the signaling of several cytokine receptors including IL-4 receptor (PubMed: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

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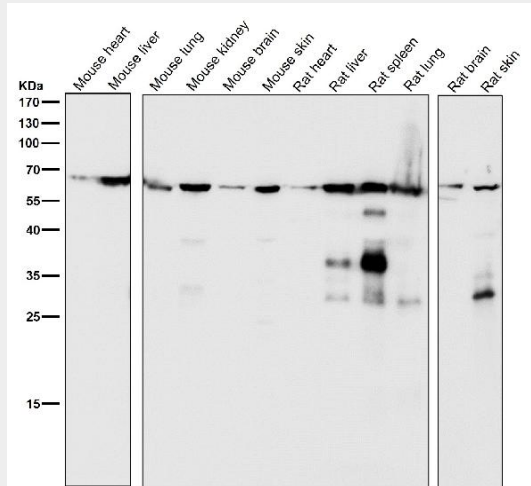
Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Protocols

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

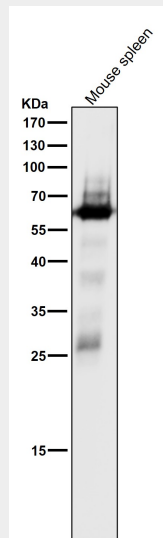
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

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

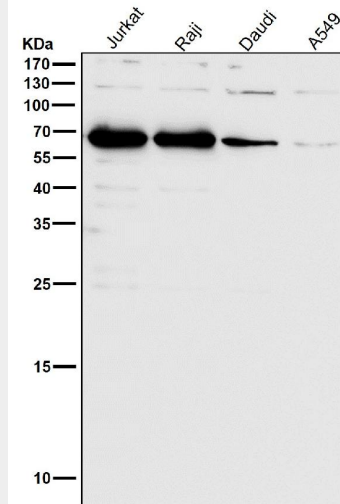
Anti-SHP1 PTPN6 Rabbit Monoclonal Antibody - Images



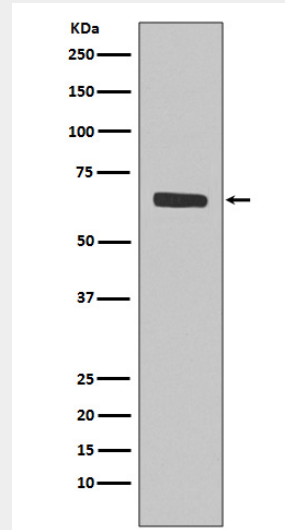
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



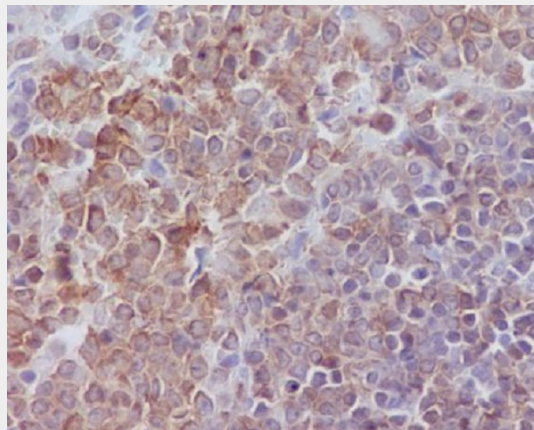
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



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.