

## SHP-1 mouse mAb

<b>Catalog No :</b>	YM1456
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IP
<b>Target :</b>	SHP-1
<b>Fields :</b>	>>Adherens junction;>>JAK-STAT signaling pathway;>>Natural killer cell mediated cytotoxicity;>>T cell receptor signaling pathway;>>B cell receptor signaling pathway;>>Pathogenic Escherichia coli infection;>>Leishmaniasis;>>Proteoglycans in cancer;>>PD-L1 expression and PD-1 checkpoint pathway in cancer
<b>Gene Name :</b>	ptpn6
<b>Human Gene Id :</b>	5777
<b>Human Swiss Prot No :</b>	P29350
<b>Mouse Swiss Prot No :</b>	P29351
<b>Immunogen :</b>	Purified recombinant human SHP-1 protein fragments expressed in E.coli.
<b>Specificity :</b>	This antibody detects endogenous levels of SHP-1 and does not cross-react with related proteins.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	wb dilution 1:1000
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 68kD

**Cell Pathway :** Adherens\_Junction;Jak\_STAT;Natural killer cell mediated cytotoxicity;T\_Cell\_Receptor;B\_Cell\_Antigen;

**Background :** The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. N-terminal part of this PTP contains two tandem Src homolog (SH2) domains, which act as protein phospho-tyrosine binding domains, and mediate the interaction of this PTP with its substrates. This PTP is expressed primarily in hematopoietic cells, and functions as an important regulator of multiple signaling pathways in hematopoietic cells. This PTP has been shown to interact with, and dephosphorylate a wide spectrum of phospho-proteins involved in hematopoietic cell signaling. Multiple alternatively spliced variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jul

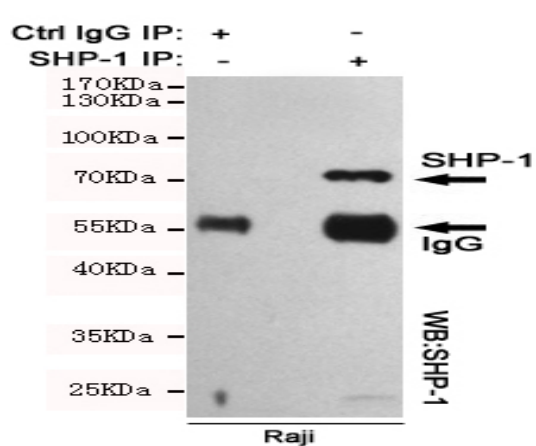
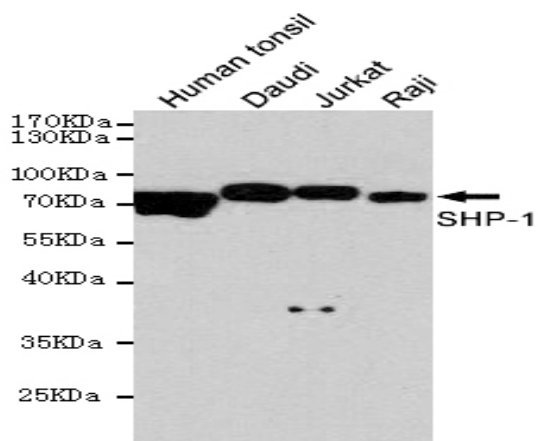
**Function :** catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,function:Plays a key role in hematopoiesis. This PTPase activity may directly link growth factor receptors and other signaling proteins through protein-tyrosine phosphorylation. The SH2 regions may interact with other cellular components to modulate its own phosphatase activity against interacting substrates. Together with MTUS1, induces UBE2V2 expression upon angiotensin II stimulation.,PTM:Phosphorylated on serine and tyrosine residues.,similarity:Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily.,similarity:Contains 1 tyrosine-protein phosphatase domain.,similarity:Contains 2 SH2 domains.,subcellular location:In neurons, translocates into the nucleus after treatment with angiotensin II.,subunit:Monomer. Interacts with MTUS1 (By similarity). Binds PTPNS1, LILRB1 and LI

**Subcellular Location :** 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. .

**Expression :** Isoform 1 is expressed in hematopoietic cells. Isoform 2 is expressed in non-hematopoietic cells.

## Products Images

Western blot detection of SHP-1 in Human tonsil, Daudi, Jurkat and Raji cell lysates using SHP-1 mouse mAb (1:1000 diluted). Predicted band size: 67KDa. Observed band size: 67KDa.



Immunoprecipitation analysis of Raji cell lysates using SHP-1 mouse mAb.