



Rabbit Anti-PTPN6 antibody

SL1129R

Product Name:	PTPN6
Chinese Name:	造血细胞磷酸酶抗体
Alias:	SHP1; 70 kda SHP 1L protein; 70 kda SHP1L protein; 70Z-SHP; EC 3.1.3.48; HCP; HCPH; Hematopoietic cell phosphatase; Hematopoietic cell protein tyrosine phosphatase; Hematopoietic cell protein-tyrosine phosphatase; HPTP 1C; HPTP1C; MGC124580; Protein tyrosine phosphatase 1C; Protein tyrosine phosphatase non receptor type 6; Protein tyrosine phosphatase SHP 1; Protein tyrosine phosphatase SHP1; Protein-tyrosine phosphatase 1C; Protein-tyrosine phosphatase SHP-1; PTN6_HUMAN; PTP 1C; PTP-1C; PTP1C; PTPN 6; PTPN6; SH PTP 1; SH PTP1; SH-PTP1; SHP 1; SHP 1L; SHP1L; SHPTP 1; SHPTP1; Tyrosine protein phosphatase non receptor type 6; Tyrosine-protein phosphatase non-receptor type 6.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	68kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SHP-1:601-695/695
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

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 2008]

Function:

Modulates signaling by tyrosine phosphorylated cell surface receptors such as KIT and the EGF receptor/EGFR. 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. Plays a key role in hematopoiesis.

Subunit:

Monomer. Interacts with MTUS1. Interacts with MILR1 (tyrosine-phosphorylated). Interacts with KIT. Binds PTPNS1, LILRB1 and LILRB2. Interacts with FCRL2, FCRL3, FCRL4, CD300LF, CDK2 and CD84. Interacts with KIR2DL1; the interaction is enhanced by ARRB2. Interacts (via SH2 1 domain) with ROS1; the interaction is direct and promotes ROS1 dephosphorylation. Interacts with EGFR; inhibits EGFR-dependent activation of MAPK/ERK. Interacts with LYN. Interacts with the tyrosine phosphorylated form of PDPK1.

Subcellular Location:

Cytoplasm. Nucleus. Note=In neurons, translocates into the nucleus after treatment with angiotensin II. 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.

Post-translational modifications:

Phosphorylated on tyrosine residues. Binding of KITLG/SCF to KIT increases tyrosine phosphorylation. Phosphorylation at Tyr-564 enhances phosphatase activity.

Similarity:

Belongs to the protein-tyrosine phosphatase family. Non-receptor class 2 subfamily. Contains 2 SH2 domains. Contains 1 tyrosine-protein phosphatase domain.

Product Detail:

SWISS:
P29350

Gene ID:
5777

Database links:

[Entrez Gene: 5777](#)Human

[Entrez Gene: 15170](#)Mouse

[Entrez Gene: 116689](#)Rat

[Olim: 176883](#)Human

[SwissProt: P29350](#)Human

[SwissProt: P29351](#)Mouse

[SwissProt: P81718](#)Rat

[Unigene: 63489](#)Human

[Unigene: 271799](#)Mouse

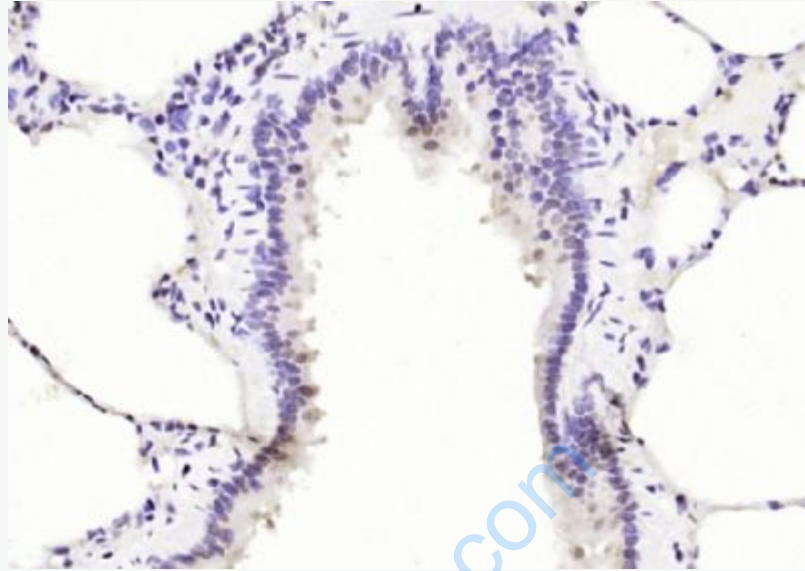
[Unigene: 18985](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

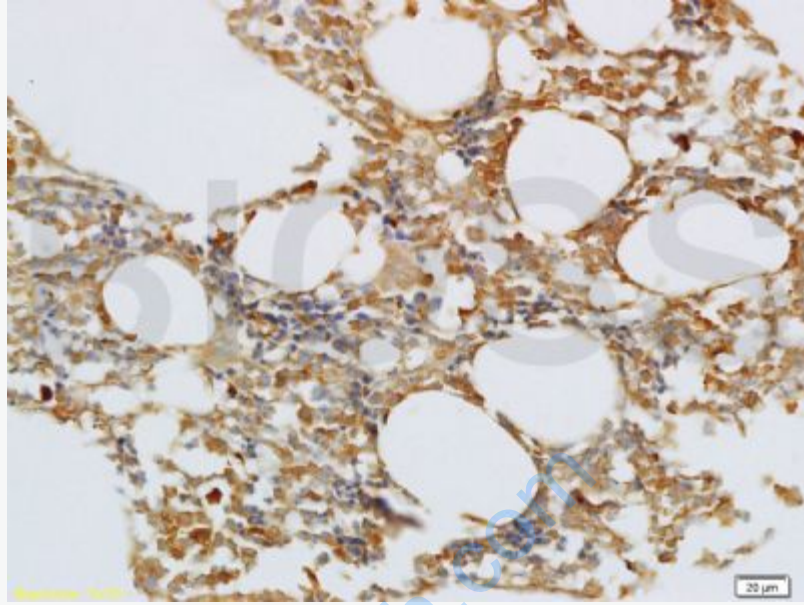
蛋白酪氨酸磷酸酶1(SHP-1)能是一个潜在的抑癌基因,它负性调节c-kit基因而抑制Tumour的发生;

SHP-1为含SH2域(src homology-2 domain)的酪氨酸磷酸酶-1,主要表达于造血细胞,因此又称为造血细胞磷酸酶(hematopoietic cell phosphatase, HCP, 也称为SHP-1或SHPTP1)。



Picture:

Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PTPN6) Polyclonal Antibody, Unconjugated (SL1129R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat bone marrow; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SHP1 Polyclonal Antibody, Unconjugated(SL1129R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining