



SH-PTP1 (phospho Tyr564) Polyclonal Antibody

Catalog No	YP-Ab-14388
Isotype	IgG
Reactivity	Human;Monkey
Applications	WB;ELISA;IHC
Gene Name	PTPN6
Immunogen	The antiserum was produced against synthesized peptide derived from human SHP-1 around the phosphorylation site of Tyr564. AA range:530-579
Specificity	Phospho-SH-PTP1 (Y564) Polyclonal Antibody detects endogenous levels of SH-PTP1 protein only when phosphorylated at Y564.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PTPN6;SHP1;EC:3.1.3.48;HCP;HCPH;SH-PTP1;Tyrosine-protein phosphatase non-receptor type 6;PTP1C;Hematopoietic cell protein-tyrosine phosphatase; Protein-tyrosine phosphatase 1C;PTP-1C;Protein-tyrosine phosphatase SHP-1
Observed Band	70kD
Calculated Molecular Weight	70kD
Cell Pathway	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.
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

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

matters needing attention

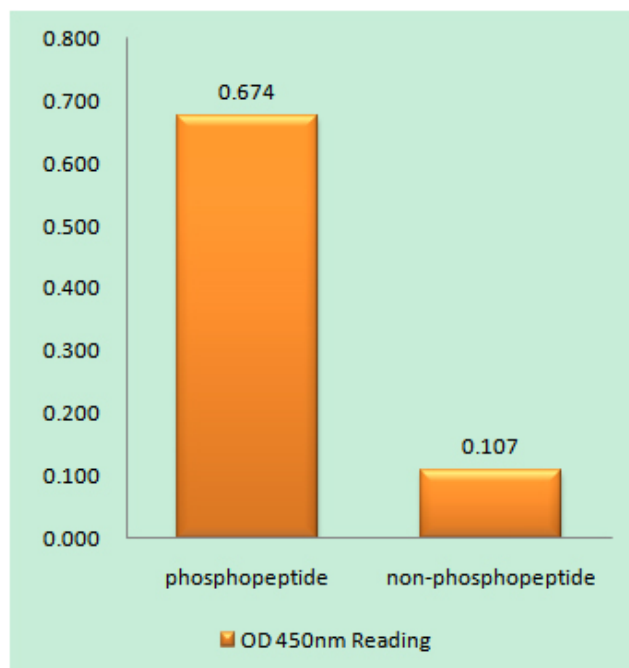
Avoid repeated freezing and thawing!

Usage suggestions

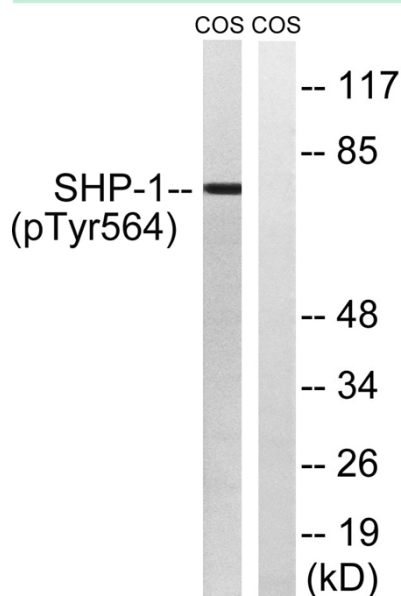
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



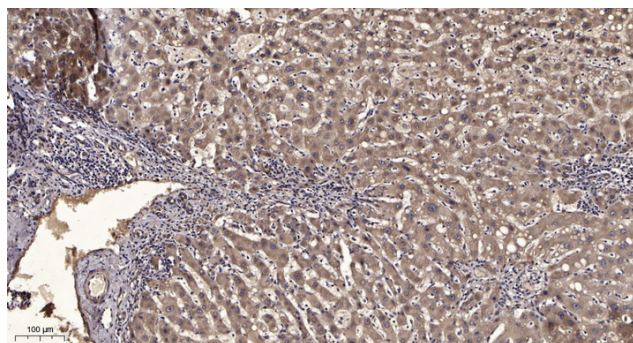
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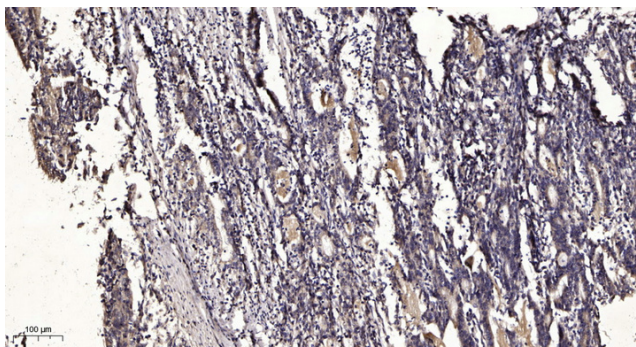
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SHP-1 (Phospho-Tyr564) Antibody



Western blot analysis of lysates from COS7 cells treated with EGF 200ng/ml 30', using SHP-1 (Phospho-Tyr564) Antibody. The lane on the right is blocked with the phosphopeptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).