

Rabbit anti-Human, Mouse SHP1/PTPN6 Polyclonal Antibody | anti-PTPN6 antibody

Anti-SHP1/PTPN6 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125581	Rabbit	Human, Mouse	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

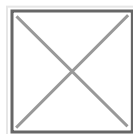
PRODUCT SYNONYMS

SHP1/PTPN6; Polyclonal Antibody; Anti-SHP1/PTPN6 Antibody; PTPN6; HCP; PTP1C; Tyrosine-protein phosphatase non-receptor type 6; EC 3. 1. 3. 48; Hematopoietic cell protein-tyrosine phosphatase; Protein-tyrosine phosphatase 1C; PTP-1C; Protein-tyrosine phosphatase SHP-1; SH-PTP1; protein tyrosine phosphatase non-receptor type 6; anti-PTPN6 antibody

PRODUCT SPECIFICATIONS

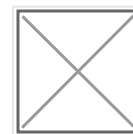
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for SHP1/PTPN6 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-PTPN6 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human SHP1/PTPN6 recombinant protein (Position: E67-K572).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A431 cells using anti-SHP1/PTPN6 antibody (AAA125581). Overlay histogram showing A431 cells stained with AAA125581 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SHP1/PTPN6 Antibody (AAA125581, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of SHP1/PTPN6 using anti-SHP1/PTPN6 antibody (AAA125581). SHP1/PTPN6 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-SHP1/PTPN6 Antibody (AAA125581) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of SHP1/PTPN6 using anti- SHP1/PTPN6 antibody (AAA125581). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates Lane 2: human Raji whole cell lysates Lane 3: mouse Raw264.7 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- SHP1/PTPN6 antigen affinity purified polyclonal antibody (Catalog # AAA125581) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SHP1/PTPN6 at approximately 68KD. The expected band size for SHP1/PTPN6 is at 68KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PTPN6 antibody	Tyrosine-protein phosphatase non-receptor type 6, also known as Src homology region 2 domain-containing phosphatase-1 (SHP-1), is an enzyme that in humans is encoded by the PTPN6 gene. 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.
References	<div>1. Banville, D., Stocco, R., Shen, S. -H. Human protein tyrosine phosphatase 1C (PTPN6) gene structure: alternate promoter usage and exon skipping generate multiple transcripts. <i>Genomics</i> 27: 165-173, 1995.</div> <div>2. Beghini, A., Ripamonti, C. B., Peterlongo, P., Roversi, G., Cairoli, R., Morra, E., Larizza, L. RNA hyperediting and alternative splicing of hematopoietic cell phosphatase (PTPN6) gene in acute myeloid leukemia. <i>Hum. Molec. Genet.</i> 9: 2297-2304, 2000.</div> <div>3. Croker, B. A., Lawson, B. R., Rutschmann, S., Berger, M., Eidenschenk, C., Blasius, A. L., Moresco, E. M. Y., Sovath, S., Cengia, L., Shultz, L. D., Theofilopoulos, A. N., Pettersson, S., Beutler, B. A. Inflammation and autoimmunity caused by a SHP1 mutation depend on IL-1, MyD88, and microbial trigger. <i>Proc. Nat. Acad. Sci.</i> 105: 15028-15033, 2008. Note: Erratum: <i>Proc. Nat. Acad. Sci.</i> 105: 19561 only, 2008.</div>

NCBI AND UNIPROT INFORMATION

NCBI GI #	18104989
NCBI GeneID	5777
NCBI Accession #	NP_002822.2
NCBI GenBank Nucleotide #	NM_002831.5
UniProt Accession #	P29350 ; Q969V8 ; Q9UK67 ; A8K306 ; G3V0F8
Molecular Weight	67,561 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 6 isoform 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 6
NCBI Official Symbol	PTPN6
NCBI Official Synonym Symbols	HCP; HCPH; SHP1; SHP-1; HPTP1C; PTP-1C; SHP-1L; SH-PTP1
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 6; hematopoietic cell phosphatase; protein-tyrosine phosphatase 1C; protein-tyrosine phosphatase SHP-1; hematopoietic cell protein-tyrosine phosphatase

UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 6
UniProt Gene Name	PTPN6
UniProt Synonym Gene Names	HCP; PTP1C; PTP-1C
UniProt Entry Name	PTN6_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/shp1-ptpn6-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125581>