Datasheet for ABIN7602271

anti-SHP1 antibody (AA 67-572)

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Overview

Quantity:	100 µg
Target:	SHP1 (PTPN6)
Binding Specificity:	AA 67-572
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SHP1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Flow Cytometry (FACS), Immunocytochemistry (ICC)

Product Details

Purpose:	Anti-SHP1/PTPN6 Antibody Picoband®
Immunogen:	E.coli-derived human SHP1/PTPN6 recombinant protein (Position: E67-K572).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-SHP1/PTPN6 Antibody Picoband® (ABIN7602271). Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	SHP1 (PTPN6)
Alternative Name:	PTPN6 (PTPN6 Products)
Background:	Synonyms: Tafazzin, Protein G4.5, TAZ, EFE2, G4.5 Tissue Specificity: High levels in cardiac and skeletal muscle. Up to 10 isoforms can be present in different amounts in different tissues. Most isoforms are ubiquitous. Isoforms that lack the N-terminus are found in leukocytes and fibroblasts, but not in heart and skeletal muscle. Some forms appear restricted to cardiac and skeletal muscle or to leukocytes. Background: 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.
Molecular Weight:	68 kDa
Gene ID:	5777
UniProt:	P29350
Pathways:	JAK-STAT Signaling, TCR Signaling, TLR Signaling, Nuclear Receptor Transcription Pathway, Positive Regulation of Peptide Hormone Secretion, Steroid Hormone Mediated Signaling Pathway, Response to Growth Hormone Stimulus, Regulation of Leukocyte Mediated Immunity, CXCR4-mediated Signaling Events, Signaling Events mediated by VEGFR1 and VEGFR2, BCR Signaling

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human ELISA, 0.1-0.5 µg/mL, -

Application Details

	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. Genomics 27: 165-173, 1995. 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. Hum. Molec. Genet. 9: 2297-2304, 2000. 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. Proc. Nat. Acad. Sci. 105: 15028-15033, 2008. Note: Erratum: Proc. Nat. Acad. Sci. 105: 19561 only, 2008.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.01 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.