Datasheet for ABIN967767

anti-SHP1 antibody (AA 492-597)

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Overview

Quantity:	150 µg
Target:	SHP1 (PTPN6)
Binding Specificity:	AA 492-597
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SHP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Human PTP1C aa.. 492-597
Clone:	52-PTP1C-SHP1
Isotype:	IgG1
Cross-Reactivity:	Dog (Canine), Rat (Rattus), Mouse (Murine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Source of all serum proteins is from USDA inspected abattoirs located in the United States. 4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	SHP1 (PTPN6)
Alternative Name:	PTP1C (PTPN6 Products)
Background:	PTP1C (SH-PTP1, SHP-1, or HCP) is a protein-tyrosine phosphatase (PTP) that is expressed in epithelial and hematopoietic cells. It contains two N-terminal SH2 domains and a C-terminal phosphatase domain. While its distribution is primarily cytosolic, exposure to various stimuli induces movement of PTP1C to other cellular locations to allow interaction with its substrates. This enzyme associates with the IL-3, IL-4, erythropoietin, and stem cell factor receptors and may regulate their signaling pathways by dephosphorylation of their receptors or their downstream effectors. Motheaten mice, which possess a nonfunctional PTP1C gene, display multiple hematopoietic abnormalities including increased proliferation and activation of myeloid cells. Studies involving these mice have clearly implicated PTP1C in negative regulation of CSF-1 (colony stimulating factor-1) mitogenic signaling and have demonstrated a role for PTP1C as an intermediate between Ras and the MAP kinase pathway.
Molecular Weight:	68 kDa
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

Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.

Handling

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:	-20 °C
Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:

Duchene, Schanstra, Pecher, Pizard, Susini, Esteve, Bascands, Girolami: "A novel protein-protein interaction between a G protein-coupled receptor and the phosphatase SHP-2 is involved in bradykinin-induced inhibition of cell proliferation." in: **The Journal of biological chemistry**, Vol. 277, Issue 43, pp. 40375-83, (2002) (PubMed).

Keilhack, Müller, Böhmer, Frank, Weidner, Birchmeier, Ligensa, Berndt, Kosmehl, Günther, Müller, Birchmeier, Böhmer: "Negative regulation of Ros receptor tyrosine kinase signaling. An epithelial function of the SH2 domain protein tyrosine phosphatase SHP-1." in: **The Journal of cell biology**, Vol. 152, Issue 2, pp. 325-34, (2001) (PubMed).

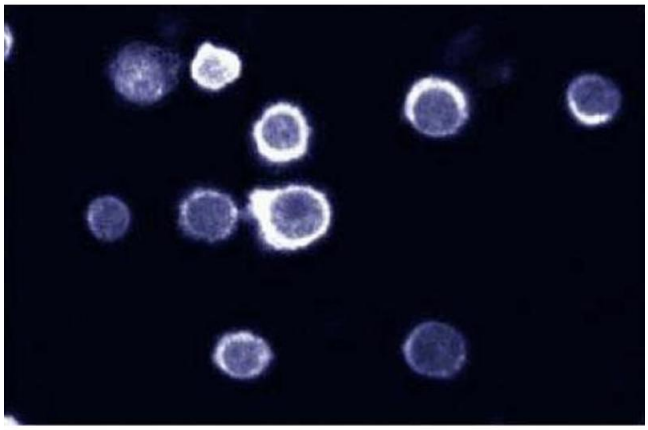
Lund-Johansen, Davis, Bishop, de Waal Malefyt: "Flow cytometric analysis of immunoprecipitates: high-throughput analysis of protein phosphorylation and protein-protein interactions." in: **Cytometry**, Vol. 39, Issue 4, pp. 250-9, (2000) (PubMed).

Liu, Hill, Chernoff: "Direct binding of the proline-rich region of protein tyrosine phosphatase 1B to the Src homology 3 domain of p130(Cas)." in: **The Journal of biological chemistry**, Vol. 271, Issue 49, pp. 31290-5, (1997) (PubMed).

Kenner, Anyanwu, Olefsky, Kusari: "Protein-tyrosine phosphatase 1B is a negative regulator of insulin- and insulin-like growth factor-I-stimulated signaling." in: **The Journal of biological chemistry**, Vol. 271, Issue 33, pp. 19810-6, (1996) (PubMed).

Western Blotting

Image 1. Western blot analysis of PTP1C on Jurkat cell lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of anti-PTP1C.



Immunofluorescence

Image 2. Immunofluorescent staining on HL60 cells.

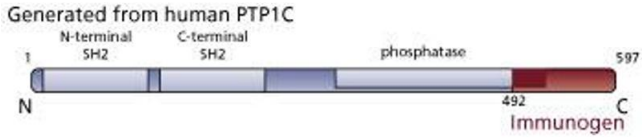


Image 3.

Please check the product details page for more images. Overall 4 images are available for ABIN967767.