

## Basic Information

<b>Product Name</b>	Anti-SHP2/PTPN11 Antibody	
<b>Gene Name</b>	PTPN11	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human SHP2, identical to the related mouse and rat sequences.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	68 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

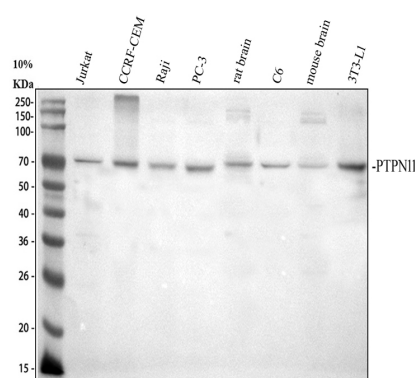
12 months from date of receipt, -20°C as supplied.

## Background Information

PTPN11 (Tyrosine-protein phosphatase non-receptor type 11), also known as protein-tyrosine phosphatase 1D (PTP-1D), protein-tyrosine phosphatase 2C (PTP-2C), TYROSINE PHOSPHATASE SHP2 (SHP2), BPTP3, SH-PTP2, SHP-2, SH-PTP3, is an enzyme that in humans is encoded by the PTPN11 gene. PTPN11 is a member of the protein tyrosine phosphatase (PTP) family. The open reading frame consists of 1,779 nucleotides potentially encoding a protein of 593 amino acids with a predicted molecular mass of 68 kD. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains two tandem Src homology-2 domains, which function as phospho-tyrosine binding domains and mediate the interaction of

this PTP with its substrates. This PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events that are important for a diversity of cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration. Mutations in this gene are a cause of Noonan syndrome as well as acute myeloid leukemia.

## Selected Validation Data



Western blot analysis of SHP2/PTPN11 using anti-SHP2/PTPN11 antibody (PB9675). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human CCRF-CEM whole cell lysates,

Lane 3: human Raji whole cell lysates,

Lane 4: human PC-3 whole cell lysates,

Lane 5: rat brain tissue lysates,

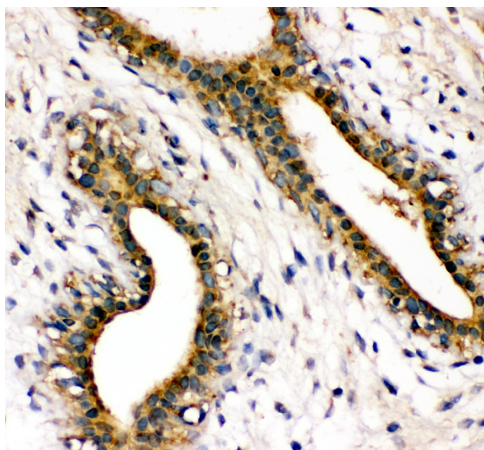
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse 3T3-L1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-SHP2/PTPN11 antigen affinity purified polyclonal antibody (PB9675) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SHP2/PTPN11 at approximately 68 kDa. The expected band size for SHP2/PTPN11 is at 68 kDa.



IHC analysis of SHP2/PTPN11 using anti-SHP2/PTPN11 antibody (PB9675).

SHP2/PTPN11 was detected in a paraffin-embedded section of human breast cancer tissue. The tissue section was incubated with rabbit anti-SHP2/PTPN11 Antibody (PB9675) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.