

## Basic Information

<b>Product Name</b>	Anti-SHP2/PTPN11 (Phospho-Y542) Antibody (Clone#FAB-16)	
<b>Gene Name</b>	PTPN11	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse	
<b>Tested Application</b>	WB, ICC/IF, IP	
<b>Contents</b>	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthesized peptide derived from human Phospho-SHP2 (Y542)	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Affinity-chromatography	
<b>Observed MW</b>	68 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	ImmunoPrecipitation (IP):	1:20

## Storage

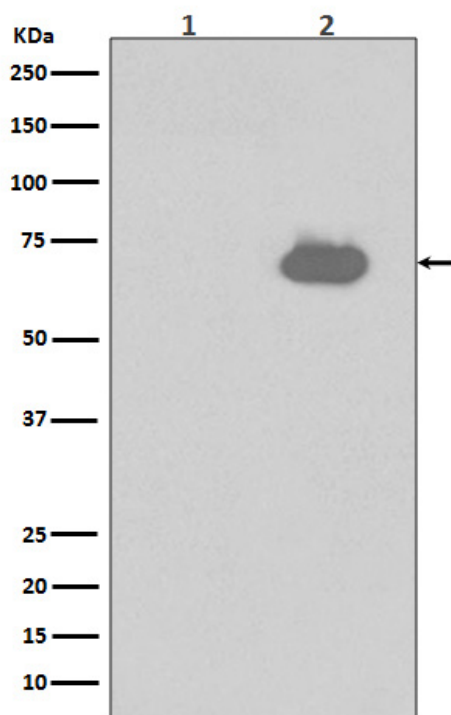
12 months from date of receipt, -20°C as supplied.

## 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), BTP3, 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 Phospho-SHP2 (Y542) expression in (1) NIH/3T3 cell lysates; (2) NIH/3T3 cell lysates treated with PDGF.