

Basic Information

Product Name	Anti-SHP2/PTPN11 Antibody	
Gene Name	PTPN11	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SHP2, different from the related rat and mouse sequences by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	68 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(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

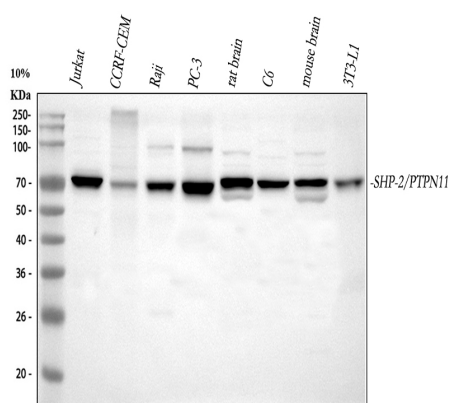
PTPN11(Tyrosine-protein phosphatase non-receptor type 11), also known as protein-tyrosine phosphatase 1D(PTP-1D), protein-tyrosine phosphatase 2C(PTP-2C), TYROSINE PHOSPHATASE SHP2(SHP2), BPTP3, SH-PTP2, SHP-2, SH-PTP3, is an enzyme that in humans is encoded by the PTPN11 gene. PTPN11 is a member of 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.

Reference

Anti-SHP2/PTPN11 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of SHP2/PTPN11 using anti-SHP2/PTPN11 antibody (BA2199-2). 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,

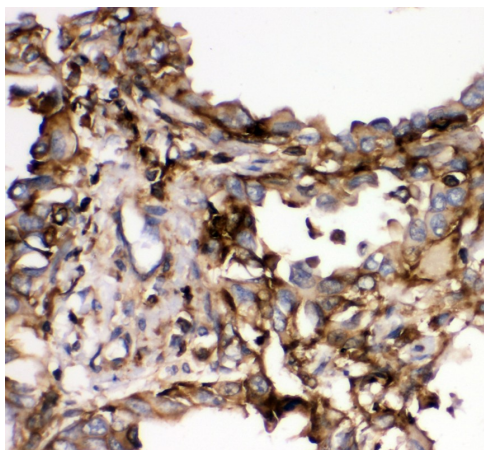
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

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

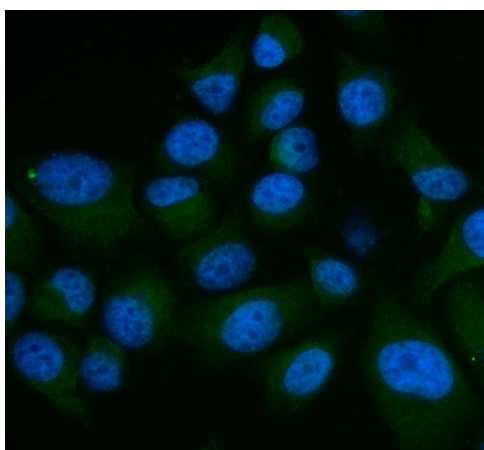
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-SHP2/PTPN11 antigen affinity purified polyclonal antibody (BA2199-2) 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.



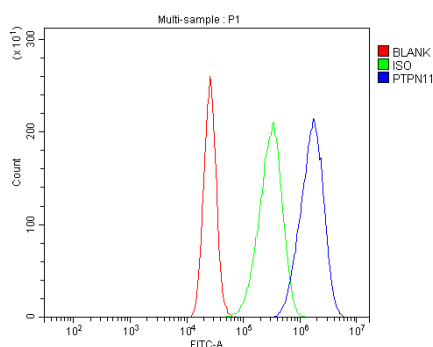
IHC analysis of SHP2/PTPN11 using anti-SHP2/PTPN11 antibody (BA2199-2) .

SHP2/PTPN11 was detected in a paraffin-embedded section of human lung cancer tissue. The tissue section was incubated with rabbit anti-SHP2/PTPN11 Antibody (BA2199-2) 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.



ICC/IF analysis of SHP2/PTPN11 using anti-SHP2/PTPN11 antibody (BA2199-2).

SHP2/PTPN11 was detected in an immunocytochemical section of PC-3 cells. The section was incubated with rabbit anti-SHP2/PTPN11 Antibody (BA2199-2) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of Caco-2 cells using anti-SHP2/PTPN11 antibody (BA2199-2).

Overlay histogram showing Caco-2 cells stained with BA2199-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SHP2/PTPN11 Antibody (BA2199-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample (Red line) was also used as a control.