

# SHP2

## Polyclonal ANTIBODY

Catalog Number: 20145-1-AP

Featured Product

13 Publications

### Basic Information

Catalog Number:  
20145-1-AP

Size:  
34 µg/150 µl

Source:  
Rabbit  
Isotype:  
IgG

Purification Method:  
Antigen affinity purification  
Immunogen Catalog Number:  
AG13660

GenBank Accession Number:  
BC008692

GeneID (NCBI):  
5781

Full Name:  
protein tyrosine phosphatase, non-receptor  
type 11

Calculated MW:  
597aa, 68 kDa  
Observed MW:  
68-75 kDa

Recommended Dilutions:

WB 1:500-1:3000  
IP 0.5-4.0 ug for IP and 1:500-1:2000 for WB  
IHC 1:100-1:400  
IF 1:10-1:100

### Applications

Tested Applications:  
IF, IHC, IP, WB, ELISA

Cited Applications:  
IHC, WB

Species Specificity:  
human, mouse, rat

Cited Species:  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB : Jurkat cells; A431 cells, HEK-293 cells, human  
brain tissue, human heart tissue, human skeletal  
muscle tissue, MCF-7 cells, NIH/3T3 cells, U-937  
cells

IP : HEK-293 cells;

IHC : human breast cancer tissue; human heart  
tissue

IF : HeLa cells; MCF-7 cells

### Background Information

PTPN11 (protein tyrosine phosphatase, non-receptor type 11) is also named as PTP-1D, PTP2, PTP2C, PTP3, SHP2, CFC, CFC, BPTP3, SH-PTP2, SH-PTP3, MGC14433 and belongs to the protein-tyrosine phosphatase family and non-receptor class 2 subfamily. It modulates and regulates signaling through numerous pathways, many of which are active in the developing endocardial cushions and implicated the ERK pathway as a central mechanism (PMD:19017799). Its signaling may play equally important roles in retinal survival in both physiological and pathological conditions (PMD:21576358). Defects in PTPN11 are the cause of LEOPARD syndrome type 1 (LEOPARD1), Noonan syndrome type 1 (NS1), juvenile myelomonocytic leukemia (JMML) and metachondromatosis (MC). It has 3 isoforms produced by alternative splicing.

### Notable Publications

Author	Pubmed ID	Journal	Application
Zhong-Qian Hu	26622699	Oncol Lett	WB, IHC
Ying Wan	29093677	Front Aging Neurosci	WB
Ighodaro Igbe	29371942	Oncotarget	WB

### Storage

Storage:  
Store at -20°C. Stable for one year after shipment.  
Storage Buffer:  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

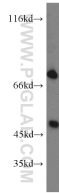
For technical support and original validation data for this  
product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll  
free in USA), or 1(312) 455-8498 (outside  
USA)

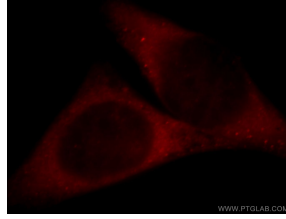
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under  
Proteintech Group brand and is not available to  
purchase from any other manufacturer.

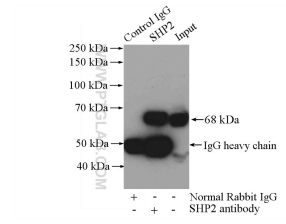
## Selected Validation Data



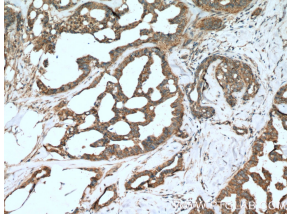
Jurkat cells were subjected to SDS PAGE followed by western blot with 20145-1-AP(SHP2 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours



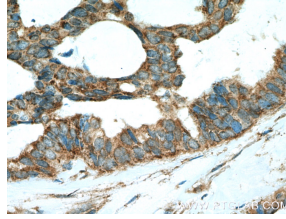
Immunofluorescent analysis of HeLa cells, using PTPN11 antibody 20145-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP Result of anti-SHP2 (IP:20145-1-AP 4ug; Detection:20145-1-AP 1:1000) with HEK-293 cells lysate 2800ug.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20145-1-AP(SHP2) antibody at dilution of 1:200 (under 10x lens), heat mediated antigen retrieved with Tris-EDTA buffer(pH9).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 20145-1-AP(SHP2) antibody at dilution of 1:200 (under 40x lens), heat mediated antigen retrieved with Tris-EDTA buffer(pH9).