

For Research Use Only

# PSPH Polyclonal antibody

Catalog Number: 14513-1-AP

Featured Product

26 Publications



## Basic Information

<b>Catalog Number:</b> 14513-1-AP	<b>GenBank Accession Number:</b> BC063614	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 333 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 5723	<b>Recommended Dilutions:</b> WB 1:500-1:3000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate IHC 1:50-1:500 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> phosphoserine phosphatase	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 25 kDa	
<b>Immunogen Catalog Number:</b> AG5972	<b>Observed MW:</b> 25-28 kDa	

## Applications

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

**Cited Applications:**  
IHC, IP, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, mouse

**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:** A375 cells, rat liver tissue, U-87 MG cells, HL-60 cells, MCF-7 cells, SK-BR-3 cells

**IP:** HL-60 cells,

**IHC:** human spleen tissue,

**IF:** HepG2 cells,

## Background Information

PSPH (phosphoserine phosphatase) is an enzyme, which is involved in the process of L-serine biosynthesis. PSPH mainly plays role in multiple aspects of cell behaviours such as proliferation and differentiation by producing precursors for the biosynthesis of diverse compounds including neurotransmitters, glycolipids and thymidine (PMID: 11237721, PMID: 19963421). Additionally, augmented PSPH level is correlated with the prognosis in multiple cancers including cutaneous squamous cell carcinoma (PMID: 21726982), breast cancer (PMID: 28931725), non-small cell lung cancer (PMID: 30662358), colorectal cancer (PMID: 24146633) and hepatocellular carcinoma (PMID: 25793315).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shengya Tian	31562192	Life Sci Alliance	WB
Ji Wang	34544857	Proc Natl Acad Sci U S A	WB
Xin Liu	34496888	Mol Cancer	WB,IHC

## 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

\*\*\* 20ul sizes contain 0.1% BSA

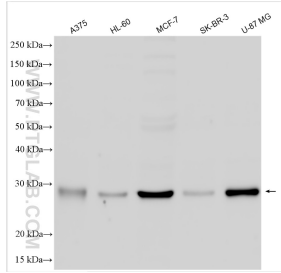
For technical support and original validation data for this product please contact:

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

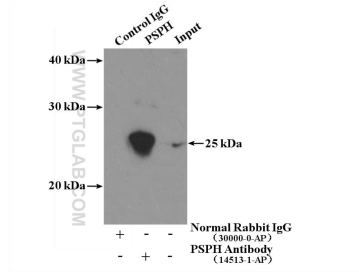
E: proteintech@ptglab.com  
W: ptglab.com

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

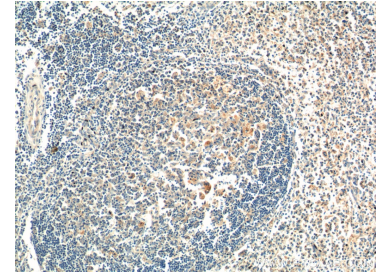
## Selected Validation Data



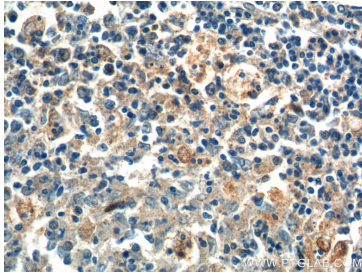
Various lysates were subjected to SDS PAGE followed by western blot with 14513-1-AP (PSPH antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



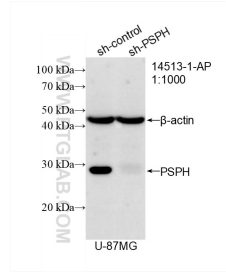
IP Result of anti-PSPH (IP:14513-1-AP, 4 $\mu$ g; Detection:14513-1-AP 1:300) with HL-60 cells lysate 3040 $\mu$ g.



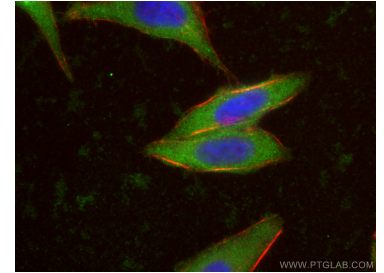
Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 14513-1-AP (PSPH Antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 14513-1-AP (PSPH Antibody) at dilution of 1:100 (under 40x lens).



WB result of PSPH antibody (14513-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PSPH transfected U-87 MG cells.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using PSPH antibody (14513-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).