

For Research Use Only

# PSPH Polyclonal antibody

Catalog Number: 14513-1-AP

Featured Product

30 Publications



## Basic Information

### Catalog Number:

14513-1-AP

### Concentration:

333 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5972

### GenBank Accession Number:

BC063614

### GeneID (NCBI):

5723

### UNIPROT ID:

P78330

### Full Name:

phosphoserine phosphatase

### Calculated MW:

25 kDa

### Observed MW:

25-28 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

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/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IP

### 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/ICC:** 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

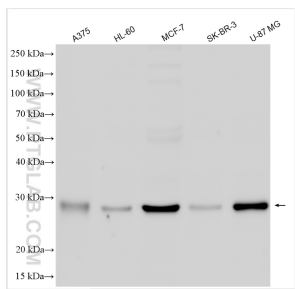
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

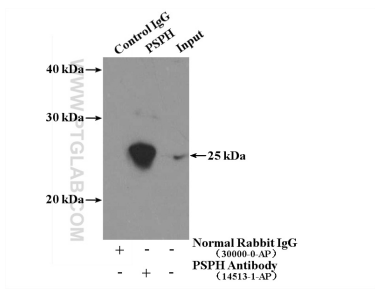
W: [ptgcn.com](http://ptgcn.com)

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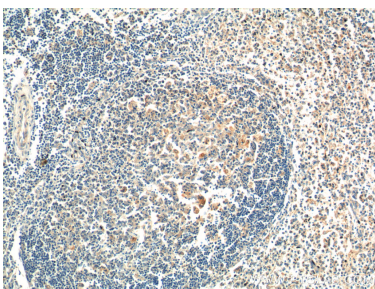
Selected Validation Data



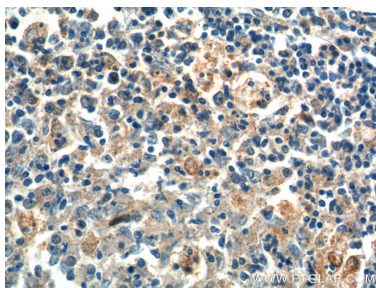
Various lysates were subjected to SDS PAGE followed by western blot with 14513-1-AP (PSPH antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



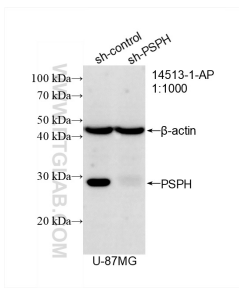
IP result of anti-PSPH (IP:14513-1-AP, 4ug; Detection:14513-1-AP 1:300) with HL-60 cells lysate 3040ug.



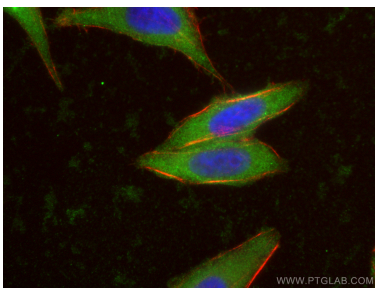
Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 14513-1-AP (PSPH Antibody) at dilution of 1:100 (under 10x lens).



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 Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).