

For Research Use Only

# SHMT1 Polyclonal antibody

Catalog Number: 14149-1-AP

Featured Product

9 Publications



## Basic Information

<b>Catalog Number:</b> 14149-1-AP	<b>GenBank Accession Number:</b> BC038598	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 300 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6470	<b>Recommended Dilutions:</b> WB 1:500-1:3000 IHC 1:50-1:500 IF 1:10-1:100
<b>Source:</b> Rabbit	<b>Full Name:</b> serine hydroxymethyltransferase 1 (soluble)	
<b>IsoType:</b> IgG	<b>Calculated MW:</b> 483 aa, 53 kDa	
<b>Immunogen Catalog Number:</b> AG5330	<b>Observed MW:</b> 45-53 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

IF, 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 : HeLa cells, HepG2 cells

IHC : human breast cancer tissue,

IF : HepG2 cells,

## Background Information

SHMT1 is the cellular form of serine hydroxymethyltransferase, a pyridoxal phosphate-containing enzyme that catalyzes the reversible conversion of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. Alternative splicing of this gene results in 2 transcript variants encoding 2 different isoforms. This antibody can detect both 49 kDa and 53 kDa isoforms in western blotting.

## Notable Publications

Author	Pubmed ID	Journal	Application
Miao Zhang	36175800	Int J Legal Med	WB
Dongqing Guo	29116138	Sci Rep	WB
Muyu Xu	29791506	PLoS Pathog	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

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

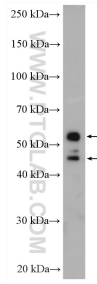
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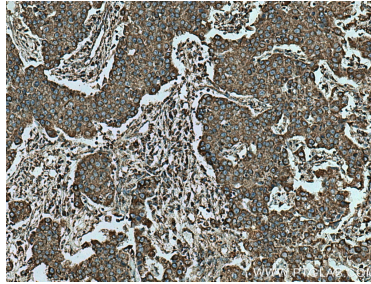
E: proteintech@ptglab.com  
W: ptglab.com

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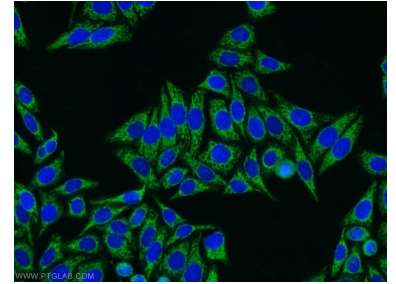
## Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 14149-1-AP (SHMT1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 14149-1-AP (SHMT1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells using 14149-1-AP (SHMT1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).