### For Research Use Only

# SHMT1 Polyclonal antibody

Catalog Number:30192-1-AP

Featured Product

2 Publications



**Basic Information** 

Catalog Number:
30192-1-AP
BC038598
Concentration:
GeneID (NCBI):
800 µg/ml
6470
Source:
UNIPROT ID:
Rabbit
P34896
Isotype:
GenBank Accession Number:
BC038598
UNCBI):
BC038598
UNCBI):
BC038598
UNIPROT ID:
F34896
Full Name:

serine hydroxymethyltransferase 1

Immunogen Catalog Number: (soluble)

AG31269 Calculated MW: 483 aa, 53 kDa

Observed MW: 45-53 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC

Species Specificity: human, mouse, rat Cited Species:

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: A431 cells, HeLa cells, MCF-7 cells, MOLT-4 cells, T-47D cells, mouse liver tissue, rat liver tissue

**Purification Method:** 

WB 1:5000-1:50000 IHC 1:500-1:2000

IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

IHC: human kidney tissue, IF/ICC: 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
Minyue Jia	39799159	Sci Rep	WB,IHC
Tianyu Han	38460155	Adv Sci (Weinh)	WB

Storage

Storage:

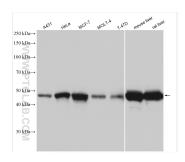
Store at -20°C. Stable for one year after shipment.

Storage Buffer

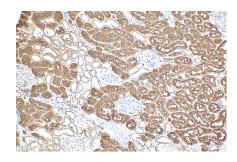
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**



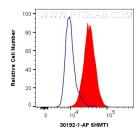
Various lysates were subjected to SDS PAGE followed by western blot with 30192-1-AP (SHMT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 30192-1-AP (SHMT1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



 $Immun of luorescent analysis of (-20^{\circ}C \ Ethanol) fixed HepG2 cells using SHMT1 antibody (30192-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). \\$ 



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human SHMT1 (30192-1-AP) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).