For Research Use Only

SHMT1 Polyclonal antibody

Catalog Number: 14149-1-AP

Featured Product

12 Publications



Purification Method:

WB: 1:500-1:3000 IHC: 1:50-1:500

IF/ICC: 1:10-1:100

Antigen affinity purification

Recommended Dilutions:

Basic Information

Catalog Number:

14149-1-AP

BC038598

Concentration:

300 µg/ml

Source:

Rabbit

Concentration:

GeneID (NCBI):

6470

UNIPROT ID:

Rabbit

P34896

Isotype:

Full Name:

serine hydroxymethyltransferase 1

Immunogen Catalog Number: (soluble)

AG5330 Calculated MW:

483 aa, 53 kDa Observed MW: 45-53 kDa

Applications

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

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/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
Miao Zhang	36175800	Int J Legal Med	WB
Dongqing Guo	29116138	Sci Rep	WB
Muyu Xu	29791506	PLoS Pathog	WB

Storage

Storage:

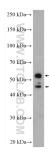
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

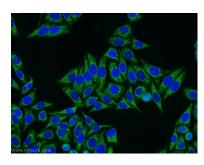
Selected Validation Data



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 paraffinembedded 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 Goat Anti-Rabbit $\lg G(H+L)$.