

# SHMT1 Rabbit pAb

Catalog No.: A12489 **2 Publications**

## Basic Information

**Observed MW**

50kDa

**Calculated MW**

53kDa

**Category**

Primary antibody

**Applications**

WB, IF/ICC, IF-P, IHC-P, ELISA

**Cross-Reactivity**

Human, Mouse, Rat

## Background

This gene encodes the cytosolic 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. This reaction provides one-carbon units for synthesis of methionine, thymidylate, and purines in the cytoplasm. This gene is located within the Smith-Magenis syndrome region on chromosome 17. A pseudogene of this gene is located on the short arm of chromosome 1. Alternative splicing results in multiple transcript variants.

## Recommended Dilutions

**WB** 1:500 - 1:1000**IF/ICC** 1:50 - 1:200**IF-P** 1:50 - 1:200**IHC-P** 1:50 - 1:200**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**

6470

**Swiss Prot**

P34896


**Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

**Synonyms**

SHMT; CSHMT; SHMT1

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

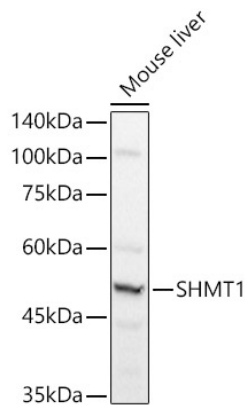
Affinity purification

**Storage**

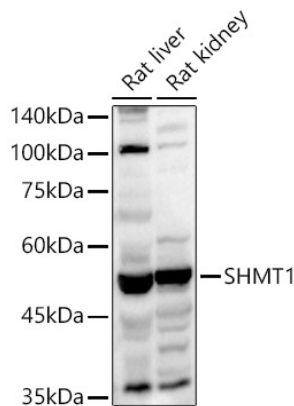
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

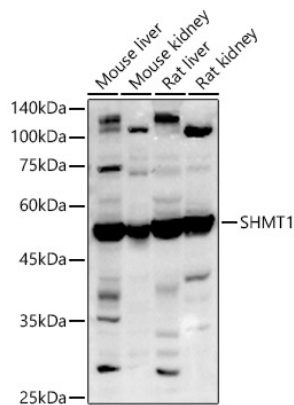
Validation Data



Western blot analysis of lysates from Mouse liver, using SHMT1 Rabbit pAb (A12489) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 1s.

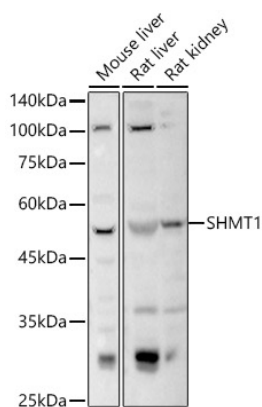


Western blot analysis of various lysates using SHMT1 Rabbit pAb (A12489) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 10s.

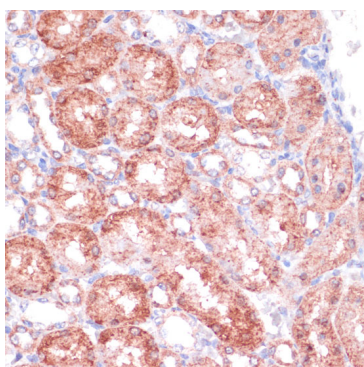


Western blot analysis of various lysates using SHMT1 Rabbit pAb (A12489) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 10s.

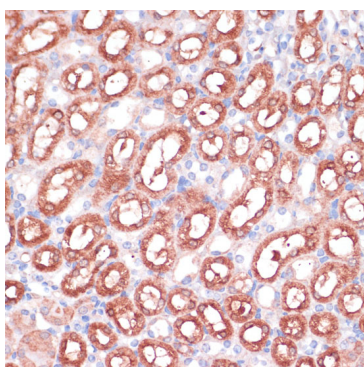
## Validation Data



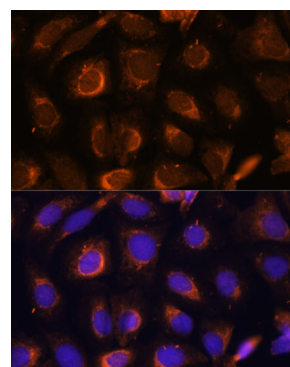
Western blot analysis of various lysates using SHMT1 Rabbit pAb (A12489) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.



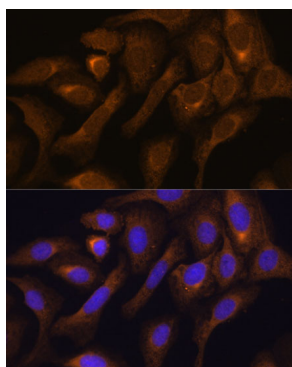
Immunohistochemistry analysis of paraffin-embedded Rat kidney using SHMT1 Rabbit pAb (A12489) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



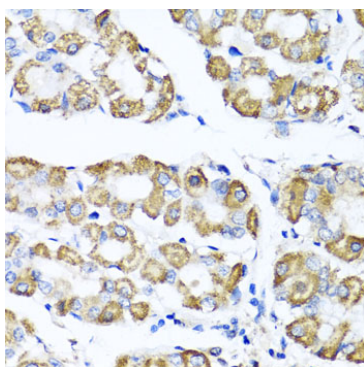
Immunohistochemistry analysis of paraffin-embedded Mouse kidney using SHMT1 Rabbit pAb (A12489) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



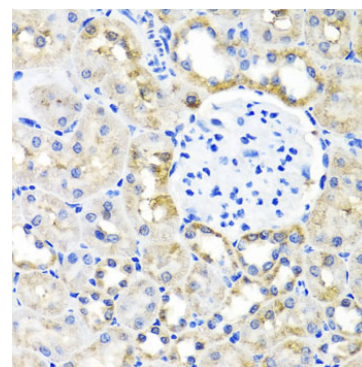
Immunofluorescence analysis of U-2 OS cells using SHMT1 Rabbit pAb (A12489) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using SHMT1 Rabbit pAb (A12489) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

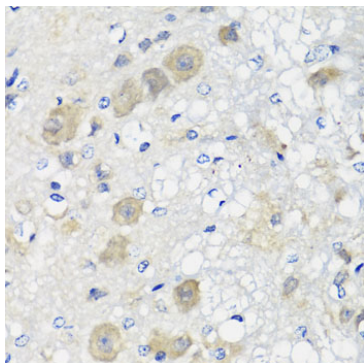


Immunohistochemistry analysis of paraffin-embedded Human stomach using SHMT1 Rabbit pAb (A12489) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.

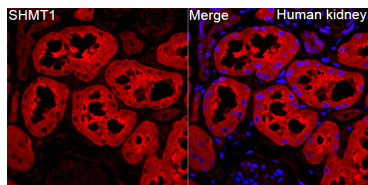


Immunohistochemistry analysis of paraffin-embedded Rat kidney using SHMT1 Rabbit pAb (A12489) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.

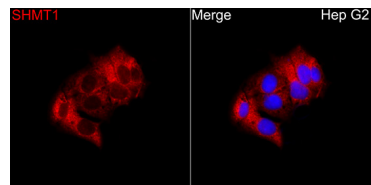
## Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat brain using SHMT1 Rabbit pAb (A12489) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunofluorescence analysis of paraffin-embedded Human kidney tissue using SHMT1 Rabbit pAb(A12489) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining. Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.



Immunofluorescence analysis of Hep G2 cells using SHMT1 Rabbit pAb(A12489) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.