

For Research Use Only

# Thymidylate synthase Polyclonal antibody

Catalog Number: 15047-1-AP

Featured Product

33 Publications



## Basic Information

### Catalog Number:

15047-1-AP

### Size:

150ul, Concentration: 850 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7027

### GenBank Accession Number:

BC002567

### GeneID (NCBI):

7298

### UNIPROT ID:

P04818

### Full Name:

thymidylate synthetase

### Calculated MW:

36 kDa

### Observed MW:

32-36 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:5000

IP 0.5-4.0 ug 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, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

WB : HeLa cells, HEK-293T cells, HEK-293 cells, MCF-7 cells

IP : HeLa cells,

IHC : human endometrial cancer tissue, human colon cancer tissue

IF/ICC : HeLa cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Thymidylate synthase gene (TYMS) encodes thymidylate synthase (TS) which is an important factor in the growth of tumor cells. TS can catalyze the transformation of intracellular uridine monophosphate (UMP) into dTMP which is required for DNA replication and repairing. TS is a key enzyme in the process of cell proliferation, also is the important target enzymes of 5-FU and other chemotherapy drugs. The expression of TYMS is negatively correlated with the efficacy of chemotherapy and the prognosis of patients who suffer from rectal cancer, breast cancer, colorectal cancer, gastric cancer, head and neck cancer, esophageal cancer, pancreatic cancer and so on.

## Notable Publications

Author	Pubmed ID	Journal	Application
Stephen Hsien-Chi Yuan	36139323	Animals (Basel)	WB
Li Cui	34533844	J Pineal Res	WB
Yiqing Zhao	32907836	Cancer Res	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

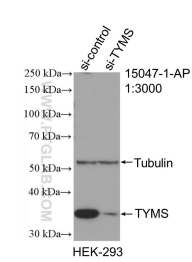
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

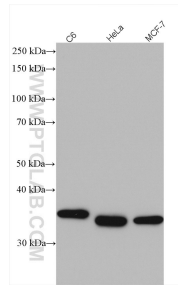
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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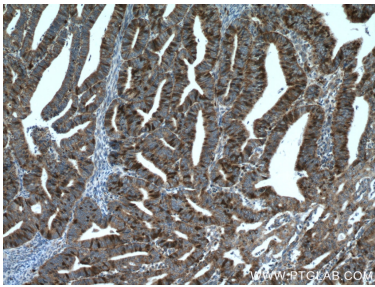
Selected Validation Data



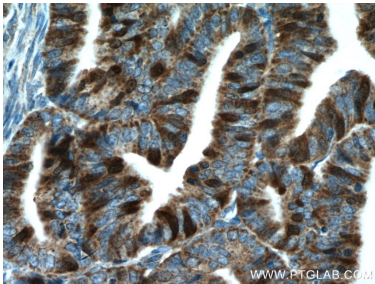
WB result of Thymidylate synthase antibody (15047-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thymidylate synthase transfected HEK-293 cells.



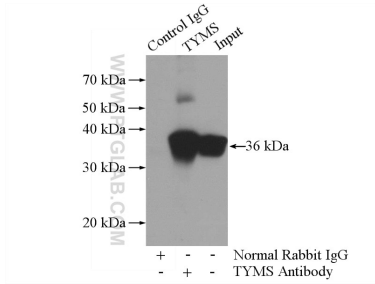
Various lysates were subjected to SDS PAGE followed by western blot with 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



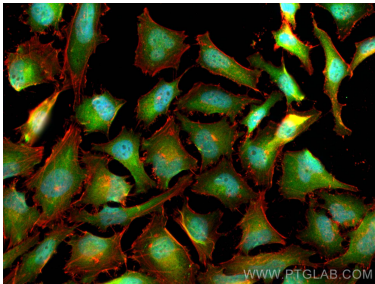
Immunohistochemical analysis of paraffin-embedded human endometrial cancer tissue slide using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human endometrial cancer tissue slide using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Thymidylate synthase (IP:15047-1-AP, 3ug; Detection:15047-1-AP 1:600) with HeLa cells lysate 3200ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Thymidylate synthase antibody (15047-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).