## For Research Use Only

## Thymidylate synthase Polyclonal antibody

Catalog Number: 15047-1-AP

**Featured Product** 

36 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 15047-1-AP BC002567 GeneID (NCBI): Concentration: 850 ug/ml 7298 **UNIPROT ID:** Source: Rabbit P04818 Full Name: Isotype:

thymidylate synthetase

Calculated MW: Immunogen Catalog Number:

AG7027 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

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, 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,

**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 unidine monophosphate (dump) 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, pH7.3

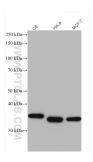
Aliquoting is unnecessary for -20°C storage

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

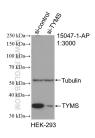
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

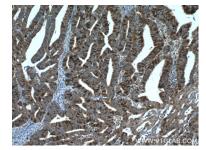
## **Selected Validation Data**



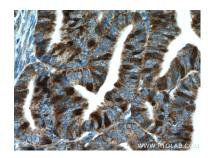
Various lysates were subjected to SDS PAGE followed by western blot with 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



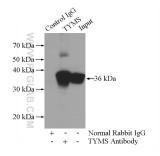
WB result of Thymidylate synthase antibody (15047-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thymidylate synthase transfected HEK-293 cells.



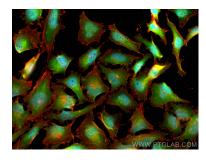
Immunohistochemical analysis of paraffinembedded human endometrial cancer tissue slide using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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).