For Research Use Only

Thymidylate synthase Polyclonal antibody

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Catalog Number:15047-1-AP Featured Product 27 Publications

Basic Information

Catalog Number:
15047-1-AP

Size:
150ul , Concentration: 850 μg/ml by Nanodrop and 307 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG7027

GenBank Accession Number:
BC002567

GeneID (NCBI):
7298

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 IP and 1:500-1:1000 for WB
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
IHC, WB

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-293 cells, HEK-293T cells, NIH/3T3 cells, MCF-7 cells

IP : HeLa cells,

IHC : human endometrial cancer tissue, human colon cancer tissue

IF : HepG2 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 uridine 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

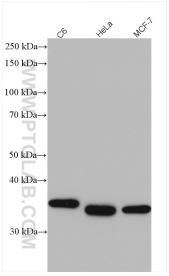
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

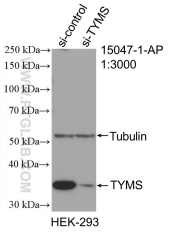
*** 20ul sizes contain 0.1% BSA

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
W: ptglab.com

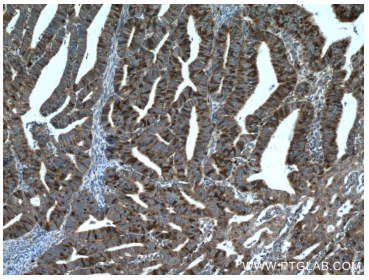
Selected Validation Data



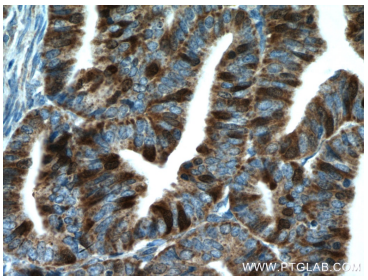
Various lysates were subjected to SDS PAGE followed by western blot with 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



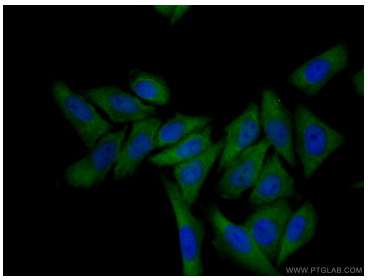
WB result of Thymidylate synthase antibody (15047-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thymidylate synthase transfected HEK-293 cells.



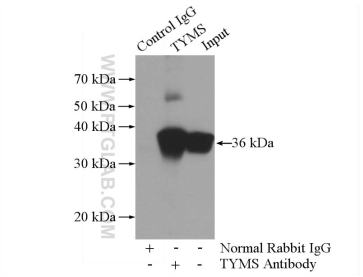
Immunohistochemical analysis of paraffin-embedded human endometrial cancer tissue slide using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



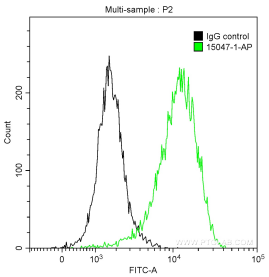
Immunohistochemical analysis of paraffin-embedded human endometrial cancer tissue slide using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 15047-1-AP (Thymidylate synthase antibody) at dilution of 1:50 and CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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



1X10^6 HeLa cells were intracellularly stained with 0.2 ug Anti-Human Thymidylate synthase (15047-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.