

For Research Use Only

Thymidylate synthase Monoclonal antibody

Catalog Number: 66725-1-Ig

Featured Product

3 Publications



Basic Information

Catalog Number:

66725-1-Ig

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG7027

GenBank Accession Number:

BC002567

GeneID (NCBI):

7298

UNIPROT ID:

P04818

Full Name:

thymidylate synthetase

Calculated MW:

36 kDa

Observed MW:

36 kDa

Purification Method:

Protein A purification

CloneNo.:

1F5B7

Recommended Dilutions:

WB: 1:2000-1:10000

IHC: 1:200-1:800

IF/ICC: 1:200-1:800

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IF

Species Specificity:

human

Cited Species:

human

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: HEK-293 cells, HepG2 cells, Jurkat cells

IHC: human pancreas cancer tissue, human colon cancer tissue

IF/ICC: HeLa cells,

FC (Intra): 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 (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
Ran Zhang	31002510	J Med Chem	WB
Kai Xiong	39835116	Front Immunol	IF
Xiaotong Wang	39326677	Biochem Pharmacol	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

*** 20ul sizes contain 0.1% BSA

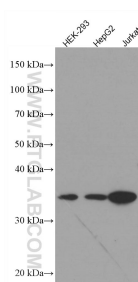
For technical support and original validation data for this product please contact:

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

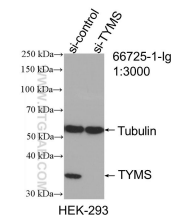
E: proteintech@ptglab.com
W: ptglab.com

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

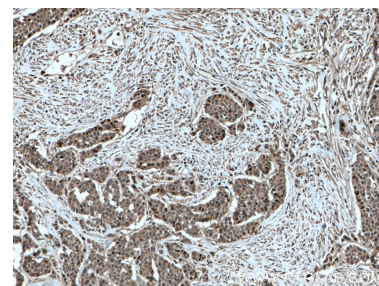
Selected Validation Data



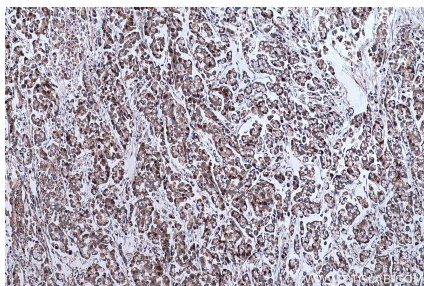
Various lysates were subjected to SDS PAGE followed by western blot with 66725-1-Ig (Thymidylate synthase antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



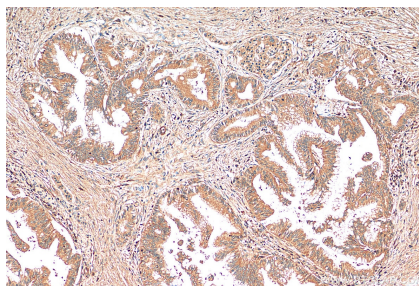
WB result of Thymidylate synthase antibody (66725-1-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Thymidylate synthase transfected HEK-293 cells.



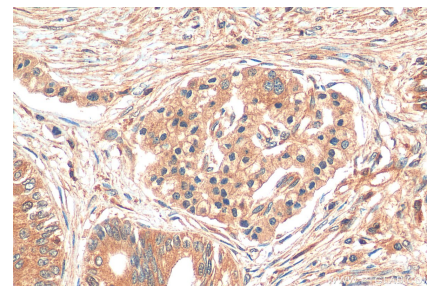
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66725-1-Ig (Thymidylate synthase antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



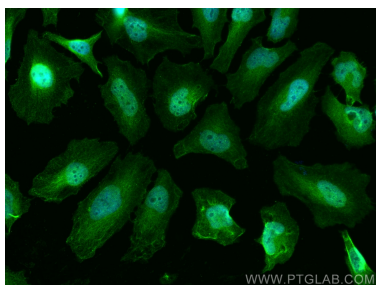
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66725-1-Ig (Thymidylate synthase antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



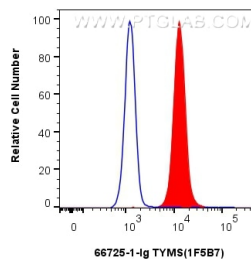
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66725-1-Ig (Thymidylate synthase antibody) at dilution of 1:400 (under 10x lens). Proteolytic pre-treatment mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66725-1-Ig (Thymidylate synthase antibody) at dilution of 1:400 (under 40x lens). Proteolytic pre-treatment mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Thymidylate synthase antibody (66725-1-Ig, Clone: 1F5B7) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1×10^6 HepG2 cells were intracellularly stained with 0.25 ug TYMS Monoclonal antibody (66725-1-Ig, Clone:1F5B7) and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.25 ug Mouse IgG1 isotype control Mouse McAb (66360-1-Ig, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).