

For Research Use Only

# TYMS Monoclonal antibody

Catalog Number: 66725-1-Ig

Featured Product

1 Publications



## Basic Information

<b>Catalog Number:</b> 66725-1-Ig	<b>GenBank Accession Number:</b> BC002567	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7298	<b>CloneNo.:</b> 1F5B7
<b>Source:</b> Mouse	<b>Full Name:</b> thymidylate synthetase	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:200-1:800 IF 1:200-1:800
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 36 kDa	
<b>Immunogen Catalog Number:</b> AG7027	<b>Observed MW:</b> 36 kDa	

## Applications

<b>Tested Applications:</b> FC, IF, IHC, WB, ELISA	<b>Positive Controls:</b> WB : HEK-293 cells, HepG2 cells, Jurkat cells
<b>Cited Applications:</b> WB	<b>IHC :</b> human pancreas cancer tissue, human colon cancer tissue
<b>Species Specificity:</b> Human	<b>IF :</b> HeLa cells,
<b>Cited Species:</b> human	

**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
Ran Zhang	31002510	J Med Chem	WB

## Storage

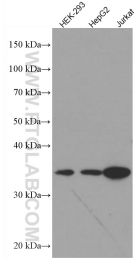
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

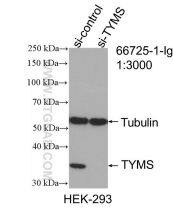
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

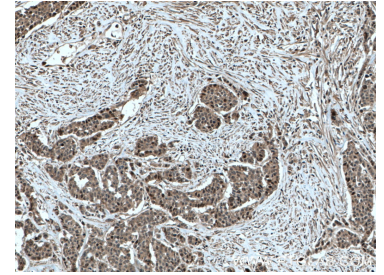
## Selected Validation Data



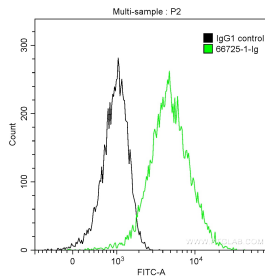
Various lysates were subjected to SDS PAGE followed by western blot with 66725-1-Ig (TYMS antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



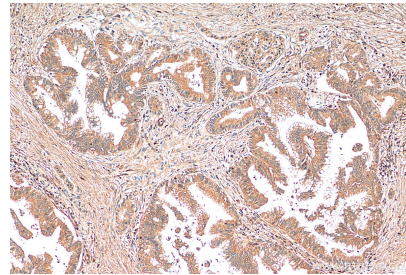
WB result of TYMS antibody (66725-1-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TYMS transfected HEK-293 cells.



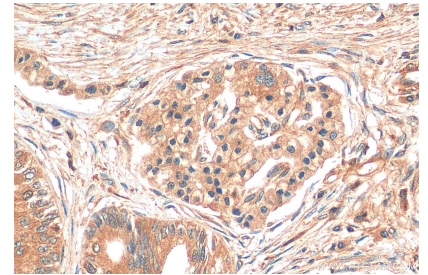
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66725-1-Ig (TYMS antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



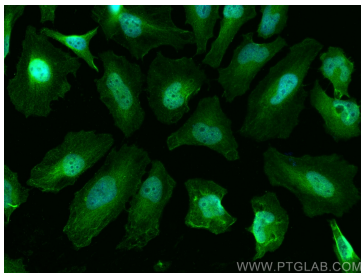
1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.2 ug Anti-Human TYMS (66725-1-Ig, Clone:1F5B7) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (black). Cells were fixed with 4% PFA and permeabilized with 0.1% TritonX-100.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66725-1-Ig (TYMS 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 (TYMS 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 TYMS antibody (66725-1-Ig, Clone: 1F5B7) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).