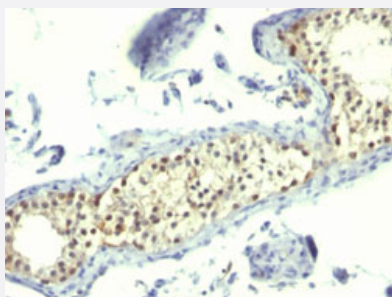


# TYMS monoclonal antibody, clone SPM453

Catalog # MAB15219      Size 100 ug

## Applications



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human testicle tumor with TYMS monoclonal antibody, clone SPM453 (Cat # MAB15219).

## Specification

|                      |                                                                                                                                                                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description  | Mouse monoclonal antibody raised against full length recombinant human TYMS.                                                                                                                                                                            |
| Immunogen            | Recombinant protein corresponding to full length human TYMS.                                                                                                                                                                                            |
| Host                 | Mouse                                                                                                                                                                                                                                                   |
| Theoretical MW (kDa) | 36                                                                                                                                                                                                                                                      |
| Reactivity           | Human                                                                                                                                                                                                                                                   |
| Form                 | Liquid                                                                                                                                                                                                                                                  |
| Purification         | Protein A/G purification                                                                                                                                                                                                                                |
| Isotype              | IgG1, kappa                                                                                                                                                                                                                                             |
| Recommend Usage      | Flow Cytometry (0.5-1 ug/10 <sup>6</sup> cells in 0.1 mL)<br>Immunofluorescence (0.5-1 ug/mL)<br>Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1-2 ug/mL)<br>The optimal working dilution should be determined by the end user. |
| Storage Buffer       | In 10 mM PBS (0.05% sodium azide).                                                                                                                                                                                                                      |

## Storage Instruction

Store at 4°C.

## Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human testicle tumor with TYMS monoclonal antibody, clone SPM453 (Cat # MAB15219).

- Immunofluorescence
- Flow Cytometry

## Gene Info — TYMS

## Entrez GeneID

[7298](#)

## Protein Accession#

[P04818](#)

## Gene Name

TYMS

## Gene Alias

HsT422, MGC88736, TMS, TS, TSase

## Gene Description

thymidylate synthetase

## Omim ID

[188350](#)

## Gene Ontology

[Hyperlink](#)

## Gene Summary

Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using 5,10-methylenetetrahydrofolate (methylene-THF) as a cofactor. This function maintains the dTMP (thymidine-5-prime monophosphate) pool critical for DNA replication and repair. The enzyme has been of interest as a target for cancer chemotherapeutic agents. It is considered to be the primary site of action for 5-fluorouracil, 5-fluoro-2-prime-deoxyuridine, and some folate analogs. Expression of this gene and that of a naturally occurring antisense transcript rTSalpha (GeneID:55556) vary inversely when cell-growth progresses from late-log to plateau phase. [provided by RefSeq]

## Other Designations

Thymidylate synthase

## Publication Reference

- [Immunological quantitation of thymidylate synthase using the monoclonal antibody TS 106 in 5-fluorouracil-sensitive and -resistant human cancer cell lines.](#)

Johnston PG, Drake JC, Trepel J, Allegra CJ.

Cancer Research 1992 Aug; 52(16):4306.

Application: Flow Cyt, IF, WB-Ce, Human, AGS, HCT-116, MCF-7, NCI H630, SNU cells

- [Production and characterization of monoclonal antibodies that localize human thymidylate synthase in the cytoplasm of human cells and tissue.](#)

Johnston PG, Liang CM, Henry S, Chabner BA, Allegra CJ.

Cancer Research 1991 Dec; 51(24):6668.

## Pathway

- [Metabolic pathways](#)
- [One carbon pool by folate](#)
- [Pyrimidine metabolism](#)

## Disease

- [Abortion](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyps](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Atherosclerosis](#)
- [Barrett Esophagus](#)
- [Behcet Syndrome](#)
- [Bile Duct Neoplasms](#)

- [Bone Neoplasms](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Central Nervous System Neoplasms](#)
- [Cholangiocarcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Dementia](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Down Syndrome](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fatigue](#)
- [Folic Acid Deficiency](#)

- [Gastrointestinal Diseases](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Heart Defects](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hyperhomocysteinemia](#)
- [Hyperplasia](#)
- [Hyperuricemia](#)
- [Joint Diseases](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Leukopenia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Metaplasia](#)
- [Micronuclei](#)
- [Microsatellite Instability](#)
- [Migraine Disorders](#)

- [Migraine with Aura](#)
- [Mouth Neoplasms](#)
- [Mucositis](#)
- [Multiple Myeloma](#)
- [Myelodysplastic Syndromes](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplastic Processes](#)
- [Neural Tube Defects](#)
- [Neurotoxicity Syndromes](#)
- [Neutropenia](#)
- [Osteonecrosis](#)
- [Osteosarcoma](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Retinal Neoplasms](#)

- [Retinoblastoma](#)
- [Spinal Dysraphism](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Urinary Bladder Neoplasms](#)
- [Venous Thrombosis](#)
- [Vitamin B 12 Deficiency](#)
- [Vomiting](#)
- [Werner syndrome](#)