

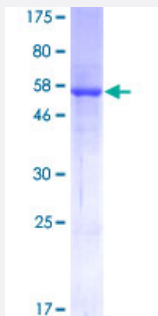
Full-Length

TYMS (Human) Recombinant Protein (P01)

Catalog # H00007298-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human TYMS full-length ORF (AAH13919.1, 1 a.a. - 313 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MPVAGSELPRRPLPPAAQERDAEPRPPHGELQYLGGIQLHRCGVRKDDRTGTGTLGVFGMQAR
YSLRDEFPLLTTRVFWKGVLEELLWFIKGSTNAKELSSKGVKIWDANGSRDFDSLGFSTREEG
DLGPVYGFQWRHFGAEYRDMESDYSQQGVDQLQRVIDTIKTNPDDRRIMCAWNPRDLPLMALP
PCHALCQFYVNSELSQQLYQRSGDMGLGVPFNIASYALLTYMIAHITGLKPGDFIHTLGDAHIYLNH
IEPLKIQQLQREPRPFPKLRILRKVEKIDDFKAEDFQIEGYNPHPTIKMEMAV

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

62.1

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TYMS

Entrez GeneID [7298](#)

GeneBank Accession# [BC013919.1](#)

Protein Accession# [AAH13919.1](#)

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

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](#)