



Mouse Anti-Human Thymidylate Synthase monoclonal antibody, clone JID808 (CABT- L2836)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human Thymidylate Synthase
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID808
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Colon Cancer
Format	Liquid
Size	Predilut: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml

Buffer	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA
Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Thymidylate Synthase (TS) is a crucial enzyme responsible for the synthesis of 2'-deoxythymidine-5'-monophosphate (dTTP) a precursor for thymidylate which is necessary for DNA replication and repair from 2'-deoxyuridine-5'-monophosphate (dUMP). In terms of cancer, TS is an important target for cancer treatment as the inhibition of TS and therefore nucleotide synthesis necessary for cell growth has shown to be a vital part for successful treatment against colorectal, pancreatic and breast cancers.
Keywords	TYMS;thymidylate synthetase;TS;TMS;HST422;thymidylate synthase;TSase;

GENE INFORMATION

Gene Name	TYMS thymidylate synthetase [Homo sapiens (human)]
Official Symbol	TYMS
Synonyms	TYMS; thymidylate synthetase; TS; TMS; HST422; thymidylate synthase; TSase;
Entrez Gene ID	7298
Protein Refseq	NP_001062
UniProt ID	P04818
Chromosome Location	18p11.32
Pathway	Cell Cycle; Cell Cycle, Mitotic; E2F mediated regulation of DNA replication; E2F transcription factor network; Fluoropyrimidine Activity; G1/S Transition; G1/S-Specific Transcription; Integrated Pancreatic Cancer Pathway;
Function	cofactor binding; drug binding; folic acid binding; mRNA binding; nucleotide binding; protein homodimerization activity; thymidylate synthase activity;