

Human Thymidylate synthase (TYMS) ELISA Kit

Catalog No: #EK5960



Package Size: #EK5960-1 48T #EK5960-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Human Thymidylate synthase (TYMS) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	HST422; MGC88736; TMS; TS; TSase thymidylate synthase
Accession No.	P04818
Uniprot	P04818
GeneID	7298;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.113 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate TYMS in samples. An antibody specific for TYMS has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTYMS present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TYMS is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TYMS bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Thymidylate synthetase (EC 2.1.1.45) is the enzyme used to generate thymidine monophosphate (dTMP), which is subsequently phosphorylated to thymidine triphosphate for use in DNA synthesis and repair. By means of reductive methylation, deoxyuridine monophosphate (dUMP) and N5,N10-methylene tetrahydrofolate are together used to form dTMP, yielding dihydrofolate as a secondary product.

As an anti-cancer chemotherapy target, thymidylate synthetase can be inhibited by the thymidylate synthase inhibitors such as fluorinated pyrimidine fluorouracil, or certain folate analogues, including most notably raltitrexed (trade name Tomudex).

Note: This product is for in vitro research use only