



Rabbit Anti-Thymidylate synthase antibody

SL8537R

Product Name:	Thymidylate synthase
Chinese Name:	胸苷酸合成酶抗体
Alias:	d TMP synthase; EC 2.1.1.45; HsT422; MGC88736; Thymidylate synthase; thymidylate synthetase; TMS; TS; TSase; TYMS; TYMS protein; Tyms thymidylate synthetase; TYSY_HUMAN .
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	36kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Thymidylate synthase/TS:65-160/313
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Thymidylate synthase (TS) is an intracellular enzyme critical for de novo synthesis of DNA. In cancer, expression of TS is often elevated and becomes further elevated as a result of treatment with the most commonly used chemotherapeutic, 5-fluorouracil (5-FU). Resistance or lack of response to 5-FU is attributed to the elevation of TS activity.

Overexpression of TS has been demonstrated in many types of tumors including breast, colon, gastric and melanoma and is usually predictive of shortened survival time.

Function:

Contributes to the de novo mitochondrial thymidylate biosynthesis pathway.

Subunit:

Homodimer.

Subcellular Location:

Nucleus. Cytoplasm. Mitochondrion. Mitochondrion matrix. Mitochondrion inner membrane.

Similarity:

Belongs to the thymidylate synthase family.

SWISS:

P04818

Gene ID:

7298

Database links:

[Entrez Gene: 7298](#)Human

[Entrez Gene: 22171](#)Mouse

[Entrez Gene: 29261](#)Rat

[Omim: 188350](#)Human

[SwissProt: P04818](#)Human

[SwissProt: P07607](#)Mouse

[SwissProt: P45352](#)Rat

[Unigene: 369762](#)Human

[Unigene: 268395](#)Mouse

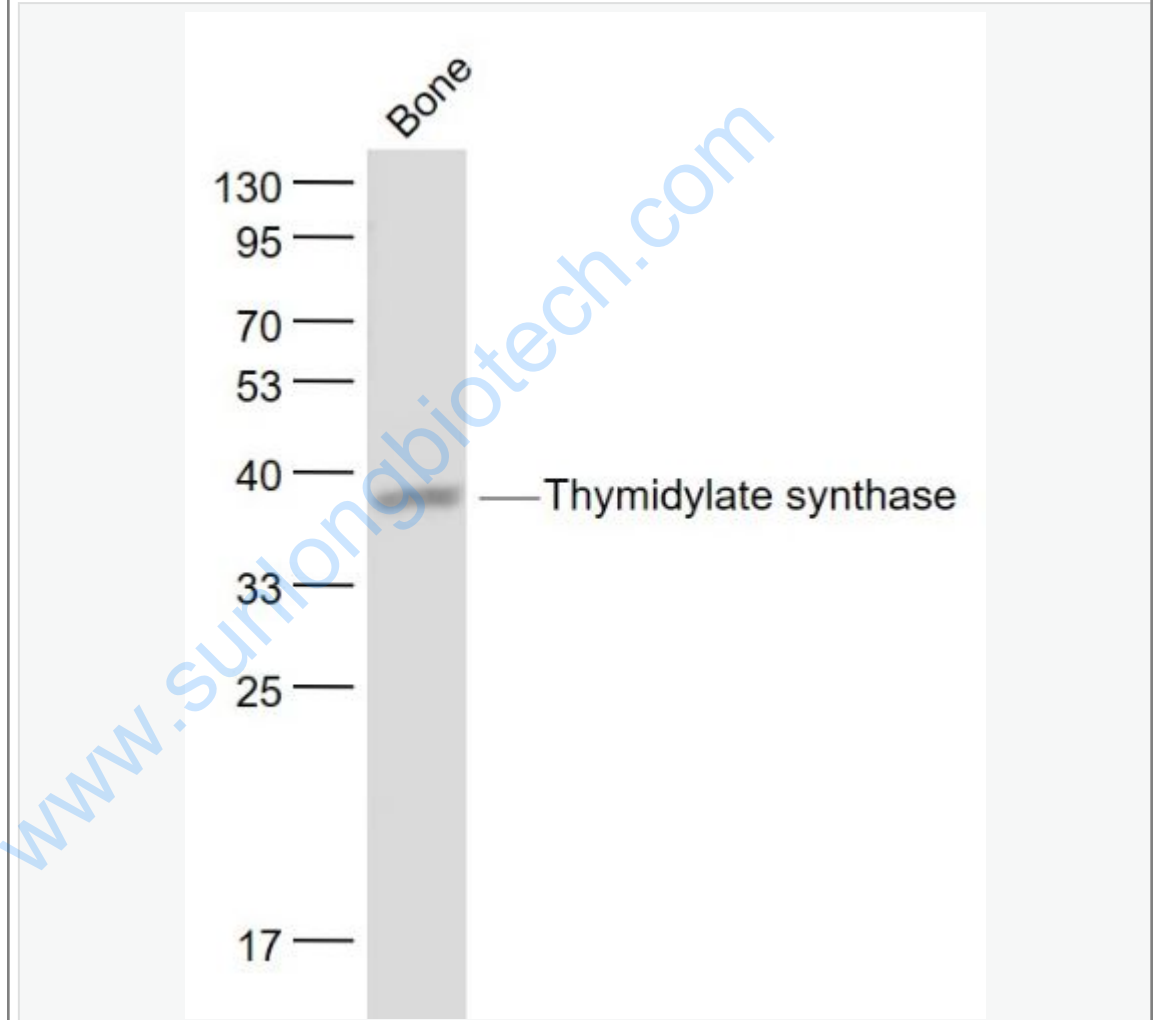
[Unigene: 162284](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

胸苷酸合成酶(thymidylate synthase, TS)是生物体内催化胸苷酸合成所必需的酶,多年来一直作为Tumour化疗的重要靶酶。对TS基因调控机制的研究表明:基因扩增、转录、翻译和翻译后过程都参与了TS表达的调控。TS可与自身的mRNA结合形成TS-mRNA复合物,使mRNA翻译受阻,5-氟尿嘧啶(5-fluorouracil,5-FU)等抗代谢药物可与TS蛋白结合,结合后的复合物不能与TS mRNA作用,导致体内TS的表达升高,是Tumour细胞产生抗药性的重要分子机制之一。

Picture:



Sample:

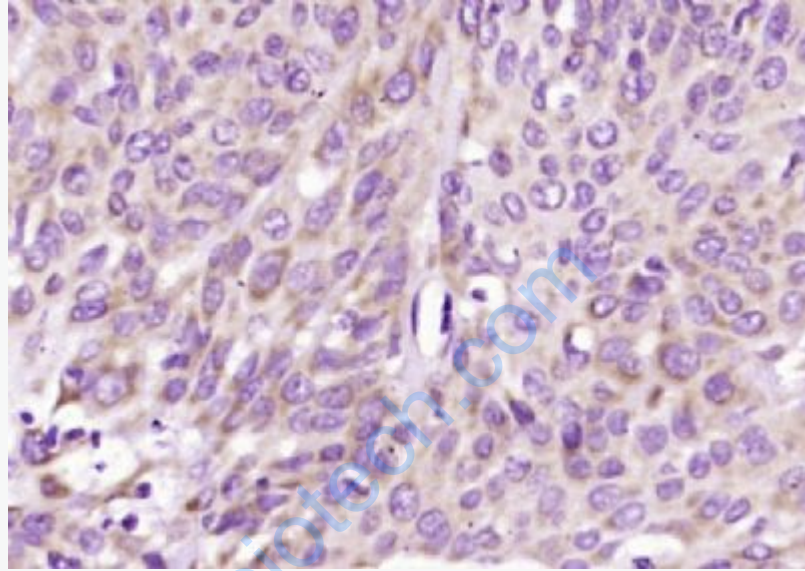
Bone (Mouse) Lysate at 40 ug

Primary: Anti- Thymidylate synthase (SL8537R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 36 kD

Observed band size: 38 kD



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Thymidylate synthase) Polyclonal Antibody, Unconjugated (SL8537R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.