

ARG57100 anti-Thymidylate Synthase antibody [21S5]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [21S5] recognizes Thymidylate Synthase
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	21S5
Isotype	IgG2b, kappa
Target Name	Thymidylate Synthase
Species	Human
Immunogen	Recombinant fragment around aa. 1-313 of Human Thymidylate Synthase
Conjugation	Un-conjugated
Alternate Names	Thymidylate synthase; TMS; TSase; TS; HST422; EC 2.1.1.45

Application Instructions

Application table	Application	Dilution
	FACS	Assay-dependent
	ICC/IF	1:500 - 1:1000
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 7298 Human](#)

[Swiss-port # P04818 Human](#)

Gene Symbol

TYMS

Gene Full Name

thymidylate synthetase

Background

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, Jul 2008]

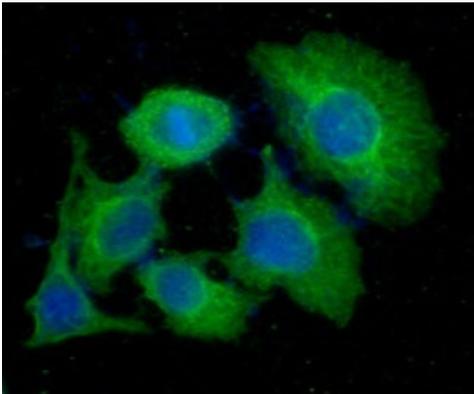
Function

Contributes to the de novo mitochondrial thymidylate biosynthesis pathway. [UniProt]

Calculated Mw

36 kDa

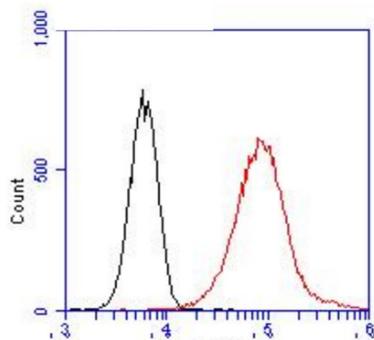
Images



ARG57100 anti-Thymidylate Synthase antibody [21S5] ICC/IF image

Immunofluorescence: HeLa cells line stained with ARG57100 anti-Thymidylate Synthase antibody [21S5] at 1:100 (Green).

DAPI (Blue) for nucleus staining.

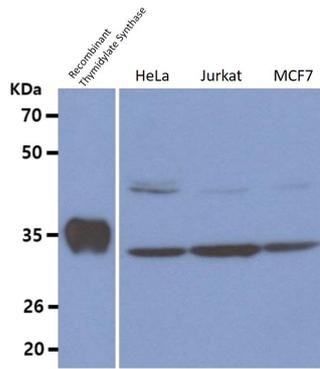


Alexa 488-anti-Thymidylate Synthase antibody

ARG57100 anti-Thymidylate Synthase antibody [21S5] FACS image

Flow Cytometry: HeLa cell line stained with ARG57100 anti-Thymidylate Synthase antibody [21S5] at 2- 5 μ g for 1×10^6 cells (red line). Secondary antibody: Goat anti-Mouse IgG Alexa fluor 488 conjugate. Isotype control antibody: Mouse IgG (black line).

ARG57100 anti-Thymidylate Synthase antibody [21S5] WB image



Western blot: 50 ng of 1) Recombinant Human TYMS protein, 40 μ g of 2) HeLa, 3) Jurkat, and 4) MCF7 cell lysates stained with ARG57100 anti-Thymidylate Synthase antibody [21S5] at 1:2000.