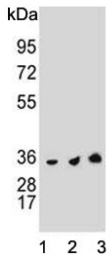
Thymidylate Synthase Antibody / TYSY (F54315)

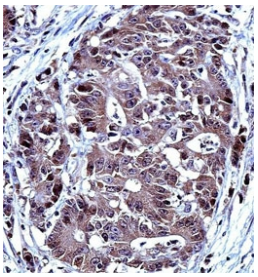
Catalog No.	Formulation	Size
F54315-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54315-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

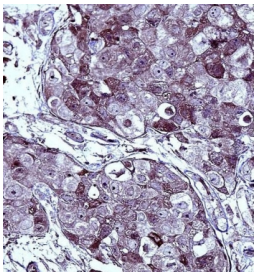
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P04818
Localization	Cytoplasmic, nuclear
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:25 Immunofluorescence: 1:25 Flow cytometry: 1:25 (1x10e6 cells)
Limitations	This Thymidylate Synthase antibody is available for research use only.



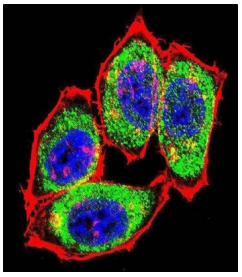
Western blot testing of human 1) HeLa, 2) Jurkat and 3) HL60 cell lysate with Thymidylate Synthase antibody. Predicted molecular weight ~36 kDa.



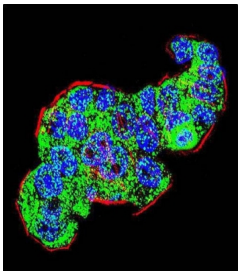
IHC testing of FFPE human colon carcinoma tissue with IRF7 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



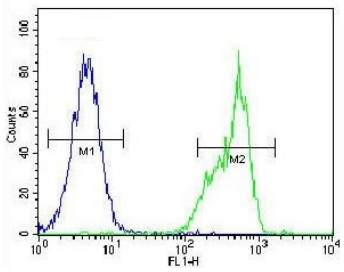
IHC testing of FFPE human breast carcinoma tissue with IRF7 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Immunofluorescent staining of fixed and permeabilized human HeLa cells with Thymidylate Synthase antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).



Immunofluorescent staining of fixed and permeabilized human WiDr cells with Thymidylate Synthase antibody (green), DAPI nuclear stain (blue) and anti-Actin (red).



Flow cytometry testing of fixed and permeabilized human HeLa cells with Thymidylate Synthase antibody; Blue=isotype control, Green= Thymidylate Synthase antibody.

Description

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.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Thymidylate Synthase antibody may

be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 265-294 from the human protein was used as the immunogen for the Thymidylate Synthase Antibody.

Storage

Aliquot the Thymidylate Synthase antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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