

Thymidylate Synthase Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
Thymidylate Synthase Concentrate	FP-A047-01	0.1 ml
Thymidylate Synthase Concentrate	FP-A047-10	1 ml
Thymidylate Synthase Predilute	FP-A047-70	7 ml

Description

Thymidylate Synthase (TS) is a crucial enzyme responsible for the synthesis of 2'-deoxythymidine-5'-monophosphate (dTMP) 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.

Specifications

Clone	IHC697
Source	Mouse Monoclonal
Applications	IHC (P)
Formulation	Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide

IHC Procedure*

Positive Control Tissue	Colon Cancer
Dilution Range	1:50 – 1:200
Pretreatment	Perform heat-induced epitope retrieval (HIER) at pH for 10 to 30 minutes
Incubation Time and Temp	10 to 30 minutes at room temperature
Detection	Refer to the corresponding user manual for detection system

*Result should be confirmed by an established diagnostic procedure.

Result

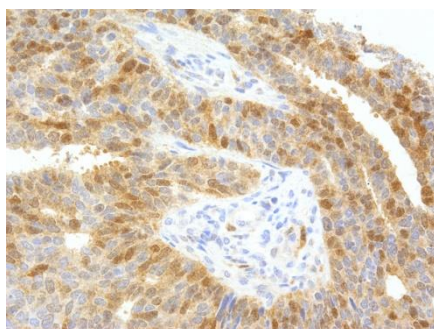


Figure. Thymidylate Synthase on Cervical Cancer



Storage and Handling

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

Precautions

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

References

1. Rose, M. G., Farrell, M. P., & Schmitz, J. C. (2002). Thymidylate synthase: a critical target for cancer chemotherapy. *Clinical colorectal cancer*, 1(4), 220-229.
2. Peters, G. J., Backus, H. H. J., Freemantle, S., Van Triest, B., Codacci-Pisanelli, G., Van der Wilt, C. L. & McLeod, H. L. (2002). Induction of thymidylate synthase as a 5-fluorouracil resistance mechanism. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease*, 1587(2-3), 194-205.

Technical Support

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for assistance with more questions regarding this product.