

Mouse Anti-Thymidylate Synthase [TS106+TMS715]: MC0951, MC0951RTU7

Intended Use: For Research Use Only

Description: TS converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), which is essential for DNA biosynthesis. TS is also a critical target for the fluoropyrimidines, an important group of antineoplastic drugs that are widely used in the treatment of solid tumors. Both 5-FU and fluorodeoxyuridine are converted in tumor cells to FdUMP which inactivates TS by formation of a ternary covalent complex in the presence of the folate cofactor 5,10-methylenetetrahydrofolate. Expression of TS protein is associated with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas.

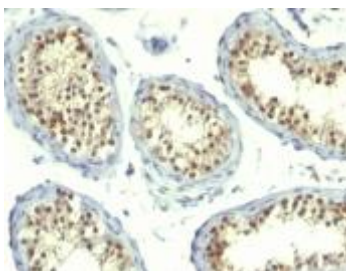
Specifications

Clone: TS106+TMS715
 Source: Mouse
 Isotype: IgG's
 Reactivity: Human
 Localization: Cytoplasm, nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., IF
 Package:

Description	Catalog No.	Size
Thymidylate Synthase Concentrated	MC0951	1 ml
Thymidylate Synthase Prediluted	MC0951RTU7	7 ml

IHC Procedure

Positive Control Tissue: Colorectal, gastric, head & neck, breast cancer
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human testicular Carcinoma stained with anti-Thymidylate Synthase using DAB

References:

1. Prognostic and therapeutic impact of argininosuccinate synthetase 1 control in bladder cancer as monitored longitudinally by PET imaging. Allen MD, et al. Cancer Res 74:896-907, 2014.
2. A phase II study of erlotinib monotherapy in pre-treated non-small cell lung cancer without EGFR gene mutation who have never/light smoking history: re-evaluation of EGFR gene status (NEJ006/TCOG0903). Matsumoto Y, et al. Lung Cancer 86:195-200, 2014.
3. Overexpression of thymidylate synthetase confers an independent prognostic indicator in nasopharyngeal carcinoma. Lee SW, et al. Exp Mol Pathol 95:83-90, 2013.

Doc. 100-MC0951
Rev. A