

36-1773: Monoclonal Antibody to Thymidylate Synthase (5-FU Resistance Marker)(Clone : SPM453)

Clonality :	Monoclonal
Clone Name :	SPM453
Application :	FACS,IF,IHC
Reactivity :	Human
Gene :	TYMS
Gene ID :	7298
Uniprot ID :	P04818
Format :	Purified
Alternative Name :	TYMS,TS,OK/SW-cl.29
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant human thymidylate synthase

Description

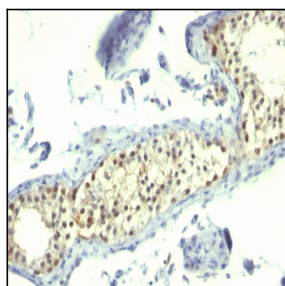
It recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). TS converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), which is essential for DNA biosynthesis. TS is also a critical target for the fluoropyrimidines, an important group of antineoplastic 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.

Product Info

Amount :	100 µg
Purification :	Affinity Chromatography
Content :	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),



Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Thymidylate Synthase Monoclonal Antibody (SPM453).