

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

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

### Description

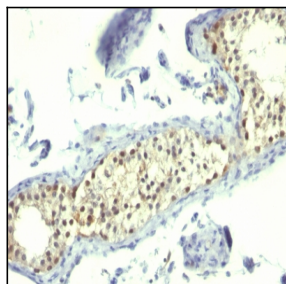
It recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). TS converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTTP), which is essential for DNA biosynthesis. TS is also a critical target for the fluoropyrimidines, an important group of antineoplastic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

<b>Amount :</b>	100 µg
<b>Purification :</b>	Affinity Chromatography
<b>Content :</b>	100 µg in 500 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
<b>Storage condition :</b>	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).