

## TYMS Antibody / Thymidylate Synthase (RQ7606)

| Catalog No. | Formulation                                           | Size   |
|-------------|-------------------------------------------------------|--------|
| RQ7606      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

|                           |                                                                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>Availability</b>       | 1-3 business days                                                                                                                 |
| <b>Species Reactivity</b> | Human, Monkey, Rat                                                                                                                |
| <b>Format</b>             | Antigen affinity purified                                                                                                         |
| <b>Clonality</b>          | Polyclonal (rabbit origin)                                                                                                        |
| <b>Isotype</b>            | Rabbit IgG                                                                                                                        |
| <b>Purity</b>             | Antigen affinity purified                                                                                                         |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose                                                                                         |
| <b>UniProt</b>            | P04818                                                                                                                            |
| <b>Applications</b>       | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml<br>Immunofluorescence : 5ug/ml<br>Direct ELISA : 0.1-0.5ug/ml |
| <b>Limitations</b>        | This TYMS antibody is available for research use only.                                                                            |



### Description

Thymidylate synthase catalyzes the methylation of deoxyuridylate to deoxythymidylate using, 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. Expression of this gene and that of a naturally occurring antisense transcript, mitochondrial

enolase superfamily member 1 (GeneID:55556), vary inversely when cell-growth progresses from late-log to plateau phase. Polymorphisms in this gene may be associated with etiology of neoplasia, including breast cancer, and response to chemotherapy.

## **Application Notes**

Optimal dilution of the TYMS antibody should be determined by the researcher.

## **Immunogen**

E. coli-derived recombinant human protein (amino acids M1-V313) was used as the immunogen for the TYMS antibody.

## **Storage**

After reconstitution, the TYMS antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.