

**Thymidine Kinase 1 Antibody**  
**Rabbit mAb**  
**Catalog # AP91060****Specification****Thymidine Kinase 1 Antibody - Product Information**

|  |                        |
|--|------------------------|
| Application  | WB, IHC, FC, ICC, IP   |
| Primary Accession  | <a href="#">P04183</a> |
| Clonality  | Monoclonal             |
| <b>Other Names</b>   |                        |
| EC 2.7.1.21; KITH; TK-1; TK1; Thymidine kinase 1; cytosolic; |                        |
| Isotype  | Rabbit IgG             |
| Host   | Rabbit                 |
| Calculated MW  | 25469 Da               |

**Thymidine Kinase 1 Antibody - Additional Information**

|                              |   |
|------------------------------|---|
| Dilution                     | WB~~1:1000<br>IHC~~1:100~500<br>FC~~1:10~50<br>ICC~~N/A<br>IP~~N/A  |
| Purification                 | Affinity-chromatography   |
| Immunogen                    | A synthesized peptide derived from human Thymidine Kinase 1   |
| Description                  | TK is a cytosolic thymidine kinase. Phosphorylated during mitosis. Its enzymatic activity is high in proliferating cells and peaks during the S-phase of the cell cycle; it is very low in resting cells. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.                         |

**Thymidine Kinase 1 Antibody - Protein Information****Name** TK1 ([HGNC:11830](#))**Function**

Cell-cycle-regulated enzyme of importance in nucleotide metabolism (PubMed:<a href="http://www.uniprot.org/citations/9575153" target="\_blank">9575153</a>). Catalyzes the first enzymatic step in the salvage pathway converting thymidine into thymidine monophosphate (PubMed:<a href="http://www.uniprot.org/citations/22385435" target="\_blank">22385435</a>). Transcriptional regulation limits expression to the S phase of the cell cycle and transient expression coincides with the oscillation in the intracellular dTTP concentration (Probable). Also important for the activation of anticancer and antiviral nucleoside analog prodrugs such as

1-b-d-arabinofuranosylcytosine (AraC) and 3c- azido-3c-deoxythymidine (AZT) (PubMed:<a href="http://www.uniprot.org/citations/22385435" target="\_blank">22385435</a>).

#### Cellular Location

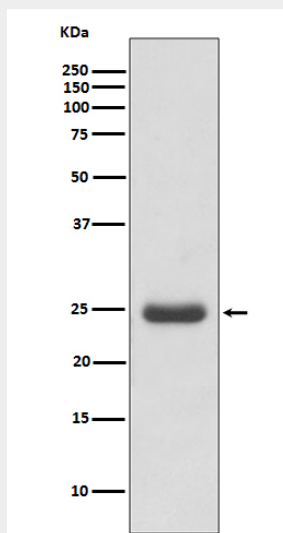
Cytoplasm.

#### Thymidine Kinase 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Thymidine Kinase 1 Antibody - Images



Western blot analysis of Thymidine Kinase 1 expression in Molt-4 cell lysate.