10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Thymidine Kinase 1 Antibody

Rabbit mAb
Catalog # AP91060

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF, FC, ICC, IP, IHF |
| **Primary Accession** | P04183 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | EC 2.7.1.21; KITH; TK-1; TK1; Thymidine kinase 1; cytosolic; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 25469 |

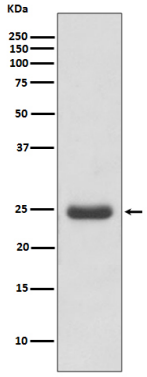
## Additional Information

| | |
|---|---|
| **Dilution** | WB 1:5000~1:20000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:20 FC 1:50 |
| **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. |

## Protein Information

| | |
|---|---|
| **Name** | TK1 ( HGNC:11830) |
| **Function** | Cell-cycle-regulated enzyme of importance in nucleotide metabolism (PubMed:9575153). Catalyzes the first enzymatic step in the salvage pathway converting thymidine into thymidine monophosphate (PubMed:22385435). 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:22385435). |
| **Cellular Location** | Cytoplasm. |

## Images




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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.