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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

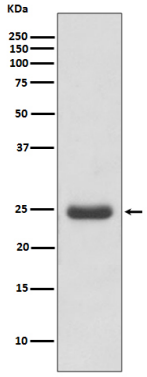
Additional Information

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.