

Anti-TK1 Picoband Antibody
Catalog # ABO12518**Specification**

Anti-TK1 Picoband Antibody - Product Information

Application	WB
Primary Accession	P04183
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Thymidine kinase, cytosolic(TK1) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TK1 Picoband Antibody - Additional Information

Gene ID 7083

Other Names

Thymidine kinase, cytosolic, 2.7.1.21, TK1

Calculated MW

25469 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm.

Protein Name

Thymidine kinase, cytosolic

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E. coli-derived human TK1 recombinant protein (Position: S2-N234). Human TK1 shares 87.1% and 91.7% amino acid (aa) sequence identity with mouse and rat TK1, respectively.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-TK1 Picoband Antibody - 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

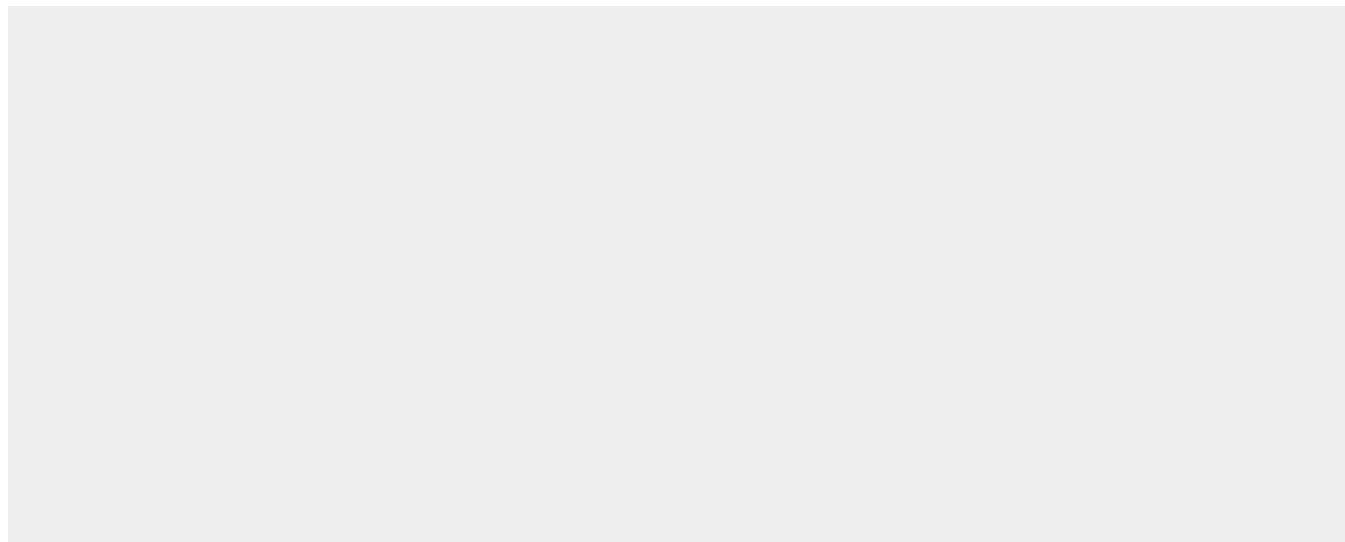
Cytoplasm.

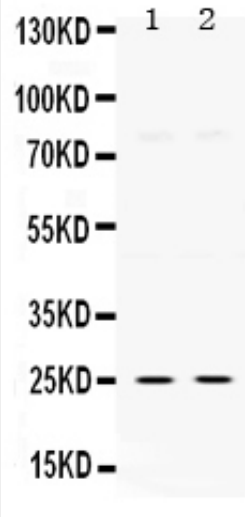
Anti-TK1 Picoband Antibody - Protocols

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](#)

Anti-TK1 Picoband Antibody - Images





Anti- TK1 Picoband antibody, ABO12518, Western blotting All lanes: Anti TK1 (ABO12518) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: SMMC Whole Cell Lysate at 40ug Predicted bind size: 25KD Observed bind size: 25KD

Anti-TK1 Picoband Antibody - Background

Thymidine kinase 1, soluble (gene name TK1), is a human thymidine kinase. Thymidine kinase catalyzes the phosphorylation of thymidine to deoxythymidine monophosphate. This gene is mapped to 17q23.2-q25.3. It is estimated that the maximal size of the TK1 gene is 14 kb and its minimal size between 4 and 5 kb. The gene contains many noncoding inserts and numerous Alu sequences. There are two forms of this protein, which have been identified in animal cells, one in cytosol and one in mitochondria. Activity of the cytosolic enzyme is high in proliferating cells and peaks during the S-phase of the cell cycle; it is very low in resting cells.