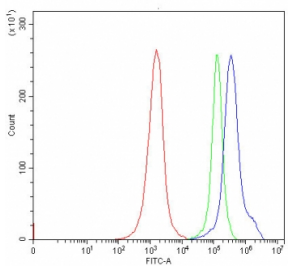
Thymidine Kinase 2 Antibody / TK2 (RQ7667)

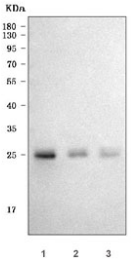
Catalog No.	Formulation	Size
RQ7667	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O00142
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Thymidine Kinase 2 antibody is available for research use only.



Flow cytometry testing of human Jurkat cells with Thymidine Kinase 2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Thymidine Kinase 2 antibody.



Western blot testing of human 1) SiHa, 2) U-87 MG and 3) A549 cell lysate with Thymidine Kinase 2 antibody. Predicted molecular weight: 20-35 kDa (multiple isoforms).

Description

Thymidine kinase 2, mitochondrial is a protein that in humans is encoded by the TK2 gene. This gene encodes a deoxyribonucleoside kinase that specifically phosphorylates thymidine, deoxycytidine, and deoxyuridine. The encoded enzyme localizes to the mitochondria and is required for mitochondrial DNA synthesis. Mutations in this gene are associated with a myopathic form of mitochondrial DNA depletion syndrome. Alternate splicing results in multiple transcript variants encoding distinct isoforms, some of which lack transit peptide, so are not localized to mitochondria.

Application Notes

Optimal dilution of the Thymidine Kinase 2 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids V34-P265) was used as the immunogen for the Thymidine Kinase 2 antibody.

Storage

After reconstitution, the Thymidine Kinase 2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.