

Product datasheet for **AP13622PU-N**

Thymidine Kinase 2 (TK2) (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1/1,000. Western blotting: 1/100 - 1/500. Flow cytometry.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of human TK2.
Specificity:	This antibody reacts to Thymidine Kinase 2 (TK2).
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	thymidine kinase 2, mitochondrial
Database Link:	Entrez Gene 7084 Human O00142



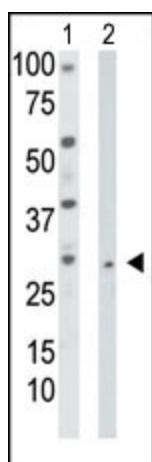
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Background:

Thymidine kinase-2 (TK2) is a deoxyribonucleoside kinase that phosphorylates thymidine, deoxycytidine, and deoxyuridine, and also phosphorylates antiviral and anticancer nucleoside analogs. Both recombinant and native forms of the enzyme have broad substrate specificity and complex kinetics, suggesting that it may play a role in the activation of chemotherapeutic nucleoside analogs. The highest levels of expression are observed in testis and ovary. The main supply of deoxyribonucleotides (dNTPs) for mitochondrial DNA synthesis comes from the salvage pathway initiated by deoxyguanosine kinase (DGK) and TK2. The association of mitochondrial DNA depletion with mutations in the genes encoding these 2 kinases suggests that the salvage pathway enzymes are involved in the maintenance of balanced mitochondrial dNTP pools.

Synonyms:

Thymidine kinase 2 mitochondrial, TK-2

Product images:

The anti-TK2 Pab is used in Western blot to detect TK2 in HepG2 cell lysate (Lane 1) and mouse liver tissue lysate (Lane 2).