

# Mouse Thymidine kinase 2, mitochondrial (TK2) ELISA Kit



Catalog No: #EK6518

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Package Size: #EK6518-1 48T #EK6518-2 96T

Support: tech@signalwayantibody.com

## Description

Product Name	Mouse Thymidine kinase 2, mitochondrial (TK2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse ( <i>Mus musculus</i> )
Accession No.	Q9R088
Uniprot	Q9R088
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:15.6-1000 pg/mL

Sensitivity:6.3 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate TK2 in samples. An antibody specific for TK2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTK2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TK2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of TK2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Thymidine kinase (EC 2.7.1.21) catalyzes the phosphorylation of thymidine to deoxythymidine monophosphate. Genetic variation in soluble thymidine kinase has not been identified in man. Weiss and Green (1967) found that fusion of mouse cells lacking this enzyme with normal human cells could be achieved, that progressive loss of human chromosomes from the hybrid occurred with passage of time, and that at a stage when only one human chromosome remained the cell still had the capacity to synthesize thymidine kinase. Two forms of Thymidine kinase 1, soluble 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.

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Note: This product is for in vitro research use only