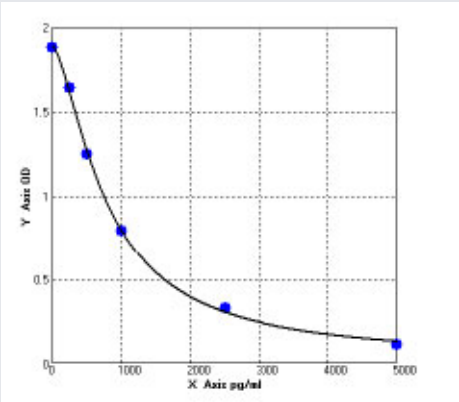
Thymidine Kinase (TK) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Thymidine Kinase (TK), ELISA Kit
Full Product Name	Human Thymidine Kinase ELISA Kit
Product Gene Name	TK elisa kit
Species Reactivity	Human
Assay Type	Quantitative Competitive
Samples	Serum, Plasma, Cell Culture Supernatants, Body Fluid And Tissue Homogenate
Sensitivity	0.1 ng/mL.
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	25,776 Da
Sample Preparation	We suggest pre-experimenting with neat (undiluted) samples, 1:2 or 1:4 dilutions. Please avoid diluting your samples more than 1:10 as it would exceed the dilution limit set for this kit. If the expected concentration of the target is beyond the detection range of the kit, please contact our technical support team
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for TK elisa kit	Intended Uses: This TJP1 ELISA kit is a 1.5 hour solid-phase ELISA designed for the quantitative determination of Porcine TJP1. This ELISA kit for research use only! Principle of the Assay: TJP1 ELISA kit applies the competitive enzyme immunoassay technique utilizing an anti-TJP1 antibody and an TJP1-HRP conjugate. The assay sample and buffer are incubated together with TJP1-HRP conjugate in pre-coated plate for one hour. After the incubation period, the wells are decanted and washed five times. The wells are then incubated with a substrate for HRP enzyme. The product of the enzyme-substrate reaction forms a blue colored complex. Finally, a stop solution is added to stop the reaction, which will then turn the solution yellow. The intensity of color is measured spectrophotometrically at 450nm in a microplate reader. The intensity of the color is inversely proportional to the TJP1 concentration since TJP1 from samples and TJP1-HRP conjugate compete for the anti-TJP1 antibody binding site. Since the number of sites is limited, as more sites are occupied by TJP1 from the sample, fewer sites are left to bind TJP1-HRP conjugate. A standard curve is plotted relating the intensity of the color (O.D.) to the concentration of standards. The TJP1 concentration in each sample is interpolated from this standard curve.
Other Notes	Small volumes of TK elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for TK purchase	MBS753532 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Thymidine Kinase (TK) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing TK. The ELISA analytical biochemical technique of the MBS753532 kit is based on TK antibody-TK antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect TK antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, TK. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of TK elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TK. It may not necessarily be applicable to this product.

NCBI GI #	202079
NCBI GeneID	21877
NCBI Accession #	AAA40454.1
UniProt Secondary Accession #	Q58EU0; Q8C3P8; Q921J8
UniProt Related Accession #	P04184
NCBI Official Full Name	thymidine kinase
NCBI Official Synonym Full Names	thymidine kinase 1
NCBI Official Symbol	Tk1
NCBI Official Synonym Symbols	Tk-1; Tk1a; Tk1b; D530002A18Rik
UniProt Protein Name	Thymidine kinase, cytosolic
Protein Family	Class II receptor tyrosine kinase
UniProt Gene Name	Tk1
UniProt Synonym Gene Names	Tk-1
UniProt Entry Name	KITH_MOUSE
NCBI Protein Information	thymidine kinase, cytosolic
UniProt Comments for TK	TK: 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. Protein type: Kinase, other; Xenobiotic Metabolism - drug metabolism - other enzymes; EC 2.7.1.21; Nucleotide Metabolism - pyrimidine Cellular Component: cytoplasm Molecular Function: transferase activity; identical protein binding; nucleoside kinase activity; zinc ion binding; metal ion binding; nucleotide binding; thymidine kinase activity; kinase activity; ATP binding Biological Process: nucleotide biosynthetic process; thymidine metabolic process; phosphorylation; protein homotetramerization; deoxyribonucleoside monophosphate biosynthetic process
Research Articles on TK	**1.** The down-regulation of Tk1 activity unmasks Tk2 deficiency in Tk2-/- mice and correlates with the onset of mtDNA depletion in the brain and the heart.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/tk-human-elisa-kits/thymidine-kinase/753532