Product Datasheet

Human Thioredoxin reductase 2, mitochondrial (TXNRD2) ELISA Kit

Catalog No: #EK5962

Package Size: #EK5962-1 48T #EK5962-2 96T



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description		
Product Name	Human Thioredoxin reductase 2, mitochondrial (TXNRD2) ELISA Kit	
Brief Description	ELISA Kit	
Applications	ELISA	
Species Reactivity	Human (Homo sapiens)	
Other Names	SELZ; TR; TR-BETA; TR3; TRXR2; OTTHUMP00000195708 selenoprotein Z thioredoxin reductase	
	3 thioredoxin reductase beta	
Accession No.	Q9NNW7	
Uniprot	Q9NNW7	
GeneID	10587;	
Storage	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.	
	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).	

Application Details

Detect Range:0.312-20 ng/mL	
Sensitivity:0.124 ng/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 TXNRD2 in samples. An antibody specific for TXNRD2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyTXNRD2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for TXNRD2 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 TXNRD2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Thioredoxin reductase (TR) is a dimeric NADPH-dependent FAD containing enzyme that catalyzes the reduction of the active site disulfide of thioredoxin and other substrates. TR is a member of a family of pyridine nucleotide-disulfide oxidoreductases and is a key enzyme in the regulation of the intracellular redox environment. Three thioredoxin reductase genes have been found that encode selenocysteine containing proteins.

TrxR2 partially overlaps the COMT gene on chromosome 22. Highly expressed in the prostate, ovary, liver, testis, uterus, colon and small intestine. Intermediate levels in brain, skeletal muscle, heart and spleen. Low levels in placenta, pancreas, thymus and peripheral blood leukocytes.

Note: This product is for in vitro research use only