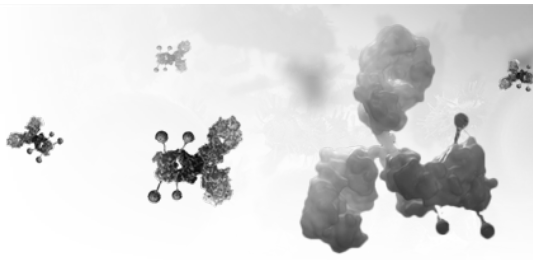

Anti-TXNRD2 polyclonal antibody (DPAB2599RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit polyclonal to human thioredoxin reductase 2.
Antigen Description	The mammalian thioredoxin reductases (TrxRs) are a family of selenocysteine-containing pyridine nucleotide-disulfide oxidoreductases. All the mammalian TrxRs are homologous to glutathione reductase with respect to primary structure including the conserved redox catalytic site (-Cys-Val-Asn-Val-Gly-Cys-) but distinctively with a C-terminal extension containing a catalytically active penultimate selenocysteine (SeCys) residue in the conserved sequence (-Gly-Cys-SeCys-Gly). TrxR is homodimeric protein in which each monomer includes an FAD prosthetic group, a NADPH binding site and a redox catalytic site. Electrons are transferred from NADPH via FAD and the active-site disulfide to C-terminal SeCys-containing redox center, which then reduces the substrate like thioredoxin. The members of TrxR family are 55 - 58 kilodalton in molecular size and composed of three isoforms including cytosolic TrxR1, mitochondrial TrxR2, and TrxR3, known as Trx and GSSG reductase (TGR). TrxR plays a key role in protection of cells against oxidative stress and redox-regulatory mechanism of transcription factors and various biological phenomena.
Immunogen	Recombinant human protein purified from E.coli.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB
Cellular Localization	Mitochondrion

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Positive Control	Jurkat cells
Format	HEPES with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol.
Size	100 µl
Preservative	0.03% Sodium Azide
Storage	Store for 1 year at -20 °C from date of shipment.

GENE INFORMATION

Gene Name	TXNRD2 thioredoxin reductase 2 [Homo sapiens]
Synonyms	TXNRD2; thioredoxin reductase 2; EC 1.8.1.9; KIAA1652; OTTHUMP00000195708; OTTHUMP00000195709; OTTHUMP00000195711; OTTHUMP00000195713; TR-BETA; EC 1.8.1.9; Selenoprotein Z; SelZ; SELZ; Thioredoxin reductase 2, mitochondrial; thioredoxin reductase 3; thioredoxin reductase beta; Thioredoxin reductase TR3; TR; TR3; TR-BETA; TR-beta; TRXR2
Entrez Gene ID	10587
Protein Refseq	NP_006431
UniProt ID	E7EWK1
Chromosome Location	22q11.21
Pathway	Oxidative Stress; Pyrimidine metabolism; Selenium Metabolism and Selenoproteins; Selenium Pathway; Selenocompound metabolism; selenium; thioredoxin pathway
Function	NADP binding; flavin adenine dinucleotide binding; hemopoiesis; response to oxygen radical; response to selenium ion

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