

Immunotag™ TrxR2 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4752
Product Description	Immunotag™ TrxR2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TrxR2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from TrxR2, at AA range: 440-520
Specificity	TrxR2 Polyclonal Antibody detects endogenous levels of TrxR2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TXNRD2
Accession No.	Q9NNW7 Q9JLT4 Q9Z0J5
Alternate Names	TXNRD2; KIAA1652; TRXR2; Thioredoxin reductase 2; mitochondrial; Selenoprotein Z; SelZ; TR-beta; Thioredoxin reductase TR3

Antibody Specification

Description	thioredoxin reductase 2(TXNRD2) Homo sapiens This gene encodes a member of the class I pyridine nucleotide-disulfide oxidoreductase family. The encoded protein is a selenocysteine-containing flavoenzyme that maintains thioredoxins in a reduced state, thereby playing a key role in regulating the cellular redox environment. Mammals have three related thioredoxin reductases. This gene encodes a mitochondrial form important for scavenging of reactive oxygen species in mitochondria. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Sep 2013],
Cell Pathway/ Category	Pyrimidine metabolism,
Protein Expression	Adrenal gland,Bone marrow,Brain,Cervix carcinoma,Fetal heart,Placenta,Pooled,Skin,T
Subcellular Localization	cell,mitochondrion,mitochondrial matrix,
Protein Function	catalytic activity:Thioredoxin + NADP(+) = thioredoxin disulfide + NADPH.,cofactor:FAD.,function:Maintains thioredoxin in a reduced state. Implicated in the defenses against oxidative stress. May play a role in redox-regulated cell signaling.,miscellaneous:The active site is a redox-active disulfide bond. The selenocysteine residue is essential for enzymatic activity.,sequence caution:Translated as Sec.,similarity:Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.,subunit:Homodimer.,tissue specificity: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. According to PubMed:10608886, high levels in kidney, whereas according to PubMed:9923614 levels are low.,
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