



TrxR2 Monoclonal Antibody

Catalog No	YP-mAb-02805
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TXNRD2
Protein Name	Thioredoxin reductase 2 mitochondrial
Immunogen	The antiserum was produced against synthesized peptide derived from human TRXR2. AA range:471-520
Specificity	TrxR2 Monoclonal Antibody detects endogenous levels of TrxR2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TXNRD2; KIAA1652; TRXR2; Thioredoxin reductase 2; mitochondrial; Selenoprotein Z; SelZ; TR-beta; Thioredoxin reductase TR3
Observed Band	56kD
Cell Pathway	Mitochondrion .
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. High expression is observed in the adrenal cortex (PubMed:24601690).
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.



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Background

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],

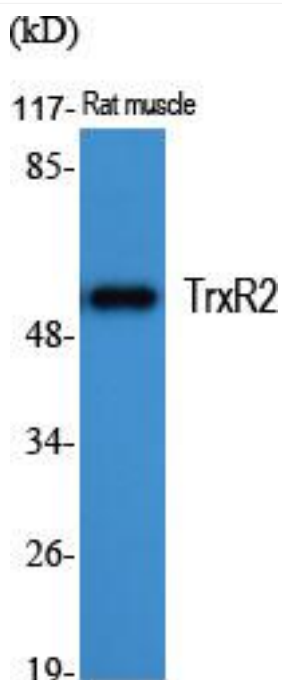
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using TrxR2 Monoclonal Antibody