

Anti-TXNRD2 Antibody

Catalog # ABO11207

Product Information

Application	WB, IHC-P
Primary Accession	Q9NNW7
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Thioredoxin reductase 2, mitochondrial(TXNRD2) detection. Tested with WB, IHC-P in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	10587
Other Names	Thioredoxin reductase 2, mitochondrial, 1.8.1.9, Selenoprotein Z, SelZ, TR-beta, Thioredoxin reductase TR3, TXNRD2, KIAA1652, TRXR2
Calculated MW	56507
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Human, Rat
Subcellular Localization	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. .
Source	Eukaryota
Protein Name	Thioredoxin reductase 2, mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TXNRD2(418-434aa RHGQEHVEVYHAHYKPL), different from the related rat sequence by three amino acids, and from the related mouse sequence by two amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.

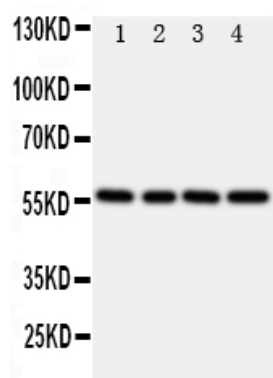
Protein Information

Name	TXNRD2 (HGNC:18155)
Synonyms	KIAA1652, TRXR2
Function	Involved in the control of reactive oxygen species levels and the regulation of mitochondrial redox homeostasis (PubMed: 24601690). Maintains thioredoxin in a reduced state. May play a role in redox- regulated cell signaling.
Cellular Location	Mitochondrion.
Tissue Location	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).

Background

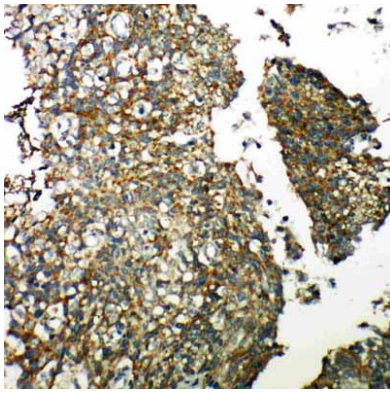
TXNRD2(Thioredoxin reductase 2), also known as TRXR2, TR3, SELZ, or TR-BETA, Thioredoxin reductases, are selenocysteine(sec)-containing flavoenzymes that maintain thioredoxins, small proteins that catalyze redox reactions, in the reduced state using the reducing power of NADPH. By STS analysis and genomic sequence analysis, respectively, Miranda-Vizuete et al.(1999) and Sun et al.(1999) mapped the TXNRD2 gene to chromosome 22q11.2. Miranda-Vizuete et al.(1999) mapped the mouse gene to chromosome 16. Gasdaska et al.(1999) showed that TXNRD2 was a thioredoxin reductase that could directly reduce proteins such as insulin.

Images



Anti-TXNRD2 antibody, ABO11207, Western blotting
 Lane 1: Rat Kidney Tissue Lysate
 Lane 2: Rat Ovary Tissue Lysate
 Lane 3: Rat Liver Tissue Lysate
 Lane 4: SMMC Cell Lysate

Anti-TXNRD2 antibody, ABO11207, IHC(P)IHC(P): Human



Lung Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.