

TrxR2 Polyclonal Antibody

Catalog No: YT4752

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: TrxR2

Fields: >>Selenocompound metabolism;>>Pathways in cancer;>>Hepatocellular

carcinoma

Gene Name: TXNRD2

Protein Name: Thioredoxin reductase 2 mitochondrial

Q9NNW7

Q9JLT4

Human Gene Id: 10587

Human Swiss Prot

No:

Mouse Gene Id: 26462

Mouse Swiss Prot

No:

Rat Gene Id: 50551

Rat Swiss Prot No: Q9Z0J5

Immunogen: The antiserum was produced against synthesized peptide derived from human

TRXR2. AA range:471-520

Specificity: TrxR2 Polyclonal Antibody detects endogenous levels of TrxR2 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 56kD

Cell Pathway : Pyrimidine metabolism;

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 RefSeg, Sep 2013],

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.,

Subcellular Location:

Mitochondrion.

Expression:

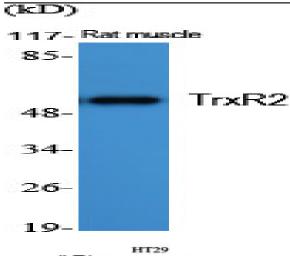
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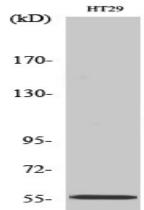
PubMed:9923614, levels are low. High expression is observed in the adrenal

cortex (PubMed:24601690).

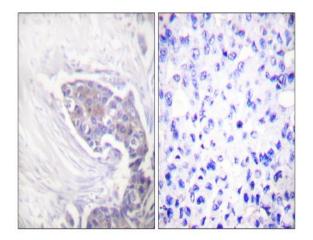
Products Images



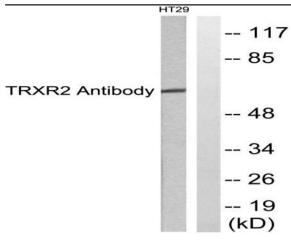
Western Blot analysis of various cells using TrxR2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western Blot analysis of HT29 cells using TrxR2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using TRXR2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HT29 cells, using TRXR2 Antibody. The lane on the right is blocked with the synthesized peptide.