
Product Name: TrxR2 Rabbit Polyclonal Antibody**Catalog #: APRab19338**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	56kDa

Antigen Information

Gene Name	TXNRD2
Alternative Names	TXNRD2; KIAA1652; TRXR2; Thioredoxin reductase 2; mitochondrial; Selenoprotein Z; SelZ; TR-beta; Thioredoxin reductase TR3
Gene ID	10587.0
SwissProt ID	Q9NNW7
Immunogen	The antiserum was produced against synthesized peptide derived from human TRXR2. AA range:471-520

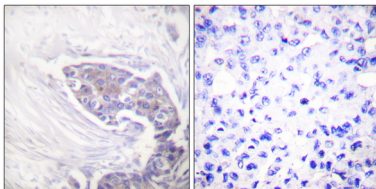
Background

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],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.,

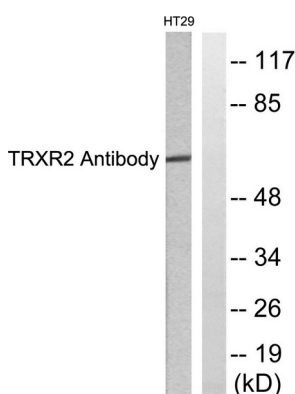
Research Area

Pyrimidine metabolism;

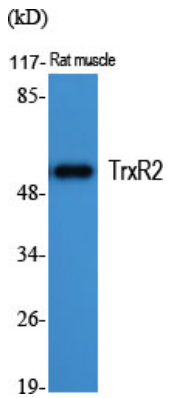
Image Data



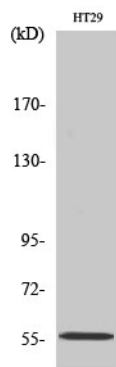
Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using TRXR2 Antibody. The picture on the right is blocked with the synthesized peptide.



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



Western Blot analysis of various cells using TrxR2 Polyclonal Antibody. Secondary antibody was diluted at 1:20000



Western Blot analysis of HT29 cells using TrxR2 Polyclonal Antibody. Secondary antibody was diluted at 1:20000