

## TXNRD2 mouse mAb

<b>Catalog No :</b>	YM1332
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB
<b>Target :</b>	TXNRD2
<b>Fields :</b>	>>Selenocompound metabolism;>>Pathways in cancer;>>Hepatocellular carcinoma
<b>Gene Name :</b>	txnrd2
<b>Human Gene Id :</b>	10587
<b>Human Swiss Prot No :</b>	Q9NNW7
<b>Mouse Swiss Prot No :</b>	Q9JLT4
<b>Immunogen :</b>	Purified recombinant human TXNRD2 protein fragments expressed in E.coli.
<b>Specificity :</b>	This antibody detects endogenous levels of TXNRD2 and does not cross-react with related proteins.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	wb 1:1000
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	56kD

**Cell Pathway :** Pyrimidine metabolism;

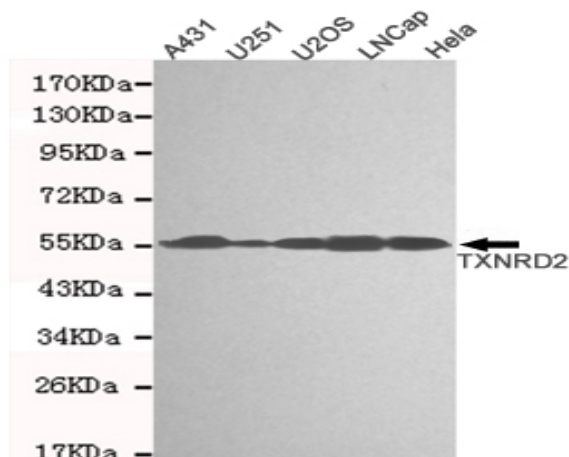
**Background :** thioredoxin reductase 2(TXNRD2) Homo sapiens This gene encodes a member of the class I pyridine nucleotide-disulfide oxidoreductase family. The encoded protein is a selenocysteine-containing flavoenzyme that maintains thioredoxins in a reduced state, thereby playing a key role in regulating 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 RefSeq, 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 :** 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).

## Products Images



Western blot detection of TXNRD2 in A431,U251,U2OS,Lncap and HeLa cell lysates and using TXNRD2 mouse mAb (1:1000 diluted).Predicted band size: 56KDa.Observed band size: 56KDa.