Best Tools for immunology Research

Total TrxR2 Cell-Based Colorimetric ELISA Kit

Catalog No :	KA3420C
Reactivity :	Human;Mouse;Rat
Applications :	ELISA
Gene Name :	TXNRD2
Human Gene Id :	10587
Human Swiss Prot No :	Q9NNW7
Mouse Swiss Prot No :	Q9JLT4
Rat Swiss Prot No :	Q9Z0J5
Storage Stability :	2-8°C/6 months
Detection Method :	Colorimetric
Background :	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.,
Function :	response to reactive oxygen species, response to oxygen radical, response to oxidative stress, response to inorganic substance, response to metal ion, response to selenium ion, cellular homeostasis, homeostatic process, cell redox homeostasis, oxidation reduction,
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).

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