

## Thioredoxin Monoclonal Antibody

<b>Catalog No :</b>	YM0618
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	Thioredoxin
<b>Fields :</b>	>>NOD-like receptor signaling pathway;>>Parkinson disease;>>Salmonella infection;>>Fluid shear stress and atherosclerosis
<b>Gene Name :</b>	TXN
<b>Protein Name :</b>	Thioredoxin
<b>Human Gene Id :</b>	7295
<b>Human Swiss Prot No :</b>	P10599
<b>Mouse Swiss Prot No :</b>	P10639
<b>Immunogen :</b>	Purified recombinant fusion protein with Thioredoxin tag.
<b>Specificity :</b>	Thioredoxin Monoclonal Antibody detects endogenous levels of Thioredoxin protein.
<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 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	12kD

**P References :**

1. Holmgen, A. et al., Annu. Rev. Biochem. 54, 237-271 (1985).
2. Wollman, E. E. et al., J. Biol. Chem. 263, 15506-15512 (1988).
3. Sasada, T. et al., J. Toxicol. Sci. 21, 285-287 (1996).

**Background :**

The protein encoded by this gene acts as a homodimer and is involved in many redox reactions. The encoded protein is active in the reversible S-nitrosylation of cysteines in certain proteins, which is part of the response to intracellular nitric oxide. This protein is found in the cytoplasm. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011],

**Function :**

function:ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).,function:Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions. Plays a role in the reversible S-nitrosylation of cysteine residues in target proteins, and thereby contributes to the response to intracellular nitric oxide. Nitrosylates the active site Cys of CASP3 in response to nitric oxide (NO), and thereby inhibits caspase-3 activity.,PTM:In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins.,similarity:Belongs to the thioredoxin family.,similarity:Contains 1 thioredoxin domain.,subunit:Homodimer; di

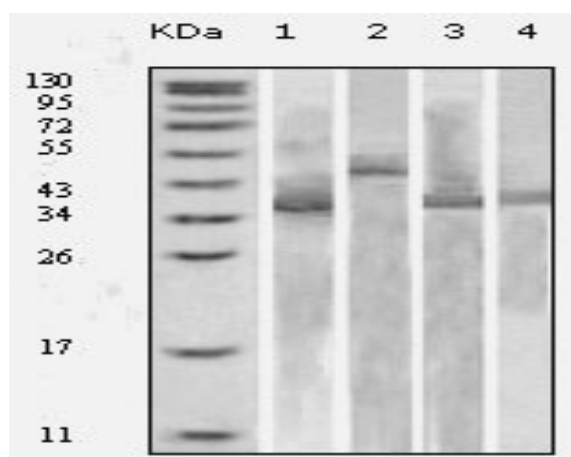
**Subcellular Location :**

Nucleus . Cytoplasm . Secreted . Translocates from the cytoplasm into the nucleus after phorbol 12-myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus (PubMed:11118054). Secreted by a leaderless secretory pathway (PubMed:1332947). .

**Expression :**

Brain,Cajal-Retzius cell,Cerebellum,Cervix,Epithelium,Fetal brain cortex,Hepatocyte,Lens,Ma

## Products Images



Western Blot analysis using Thioredoxin Monoclonal Antibody against various fusion protein with Thioredoxin tag.