

Thioredoxin Monoclonal Antibody

Catalog No: YM0618

Reactivity: Human

Applications: WB;ELISA

Target: Thioredoxin

Fields: >>NOD-like receptor signaling pathway;>>Parkinson disease;>>Salmonella

infection;>>Fluid shear stress and atherosclerosis

Gene Name: TXN

Protein Name: Thioredoxin

Human Gene Id: 7295

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fusion protein with Thioredoxin tag.

Specificity: Thioredoxin Monoclonal Antibody detects endogenous levels of Thioredoxin

protein.

P10599

P10639

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

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

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

Molecularweight: 12kD

1/2

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

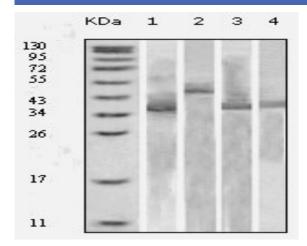
Subcellular Location :

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.