

## **TRX1** Antibody

Rabbit mAb Catalog # AP91111

## **Specification**

## **TRX1 Antibody - Product Information**

Application WB, IHC, ICC, IP

Primary Accession P10599
Clonality Monoclonal

**Other Names** 

TXN; ADF; ATL-derived factor; SASP; Thioredoxin; TRX1; Thioredoxin delta 3; TRX; TXN delta 3;

TRDX;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 11737 Da

# **TRX1 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

TRX1

Description Thioredoxin (Trx) is a redox protein that is

found in several species, such as bacteria, plants and mammals, and contains a conserved active site, consisting of Trp-Cys-Gly-Pro-Cys. Participates in many

cellular processes including redox signaling, response to oxidative stress,

and protein reduction

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

### **TRX1 Antibody - Protein Information**

**Name TXN** 

Synonyms TRDX, TRX, TRX1

## **Function**

Participates in various redox reactions through the reversible oxidation of its active center dithiol to a disulfide and catalyzes dithiol-disulfide exchange reactions (PubMed:<a href="http://www.uniprot.org/citations/17182577" target="\_blank">17182577</a>, PubMed:<a href="http://www.uniprot.org/citations/19032234" target="\_blank">19032234</a>, PubMed:<a href="http://www.uniprot.org/citations/2176490" target="\_blank">2176490</a>). 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 (PubMed:<a

href="http://www.uniprot.org/citations/16408020" target="\_blank">16408020</a>, PubMed:<a href="http://www.uniprot.org/citations/17606900" target="\_blank">17606900</a>). Induces the FOS/JUN AP-1 DNA-binding activity in ionizing radiation (IR) cells through its oxidation/reduction status and stimulates AP-1 transcriptional activity (PubMed:<a

href="http://www.uniprot.org/citations/11118054" target="\_blank">11118054</a>, PubMed:<a href="http://www.uniprot.org/citations/9108029" target="\_blank">9108029</a>).

#### **Cellular Location**

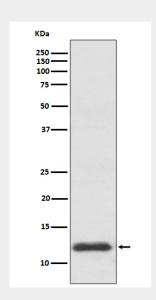
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus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

#### **TRX1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### TRX1 Antibody - Images



Western blot analysis of TRX1 expression in HepG2 cell lysate.