

**TRX1 Antibody**  
Rabbit mAb  
Catalog # AP91111

## Specification

---

### TRX1 Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">P10599</a>
Clonality	<b>Monoclonal</b>
<b>Other Names</b>	
TXN; ADF; ATL-derived factor; SASP; Thioredoxin; TRX1; Thioredoxin delta 3; TRX; TXN delta 3; TRDX;	
Isotype	<b>Rabbit IgG</b>
Host	<b>Rabbit</b>
Calculated MW	<b>11737 Da</b>

### TRX1 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human TRX1</b>
Description	<b>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</b>
Storage Condition and Buffer	<b>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.</b>

### 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:[17182577](http://www.uniprot.org/citations/17182577), PubMed:[19032234](http://www.uniprot.org/citations/19032234), PubMed:[2176490](http://www.uniprot.org/citations/2176490)). 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

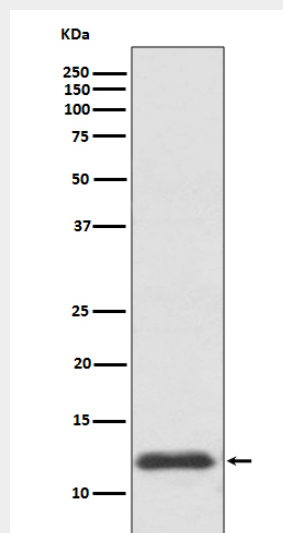
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus (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 Cytometry](#)
- [Cell Culture](#)

### TRX1 Antibody - Images



Western blot analysis of TRX1 expression in HepG2 cell lysate.