

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

Dilution WB~~1:1000

IHC~~1:100~500

ICC~~N/A IP~~N/A

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, PubMed:19032234, PubMed: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:16408020, PubMed:17606900). 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:11118054, PubMed:9108029).

Cellular Location

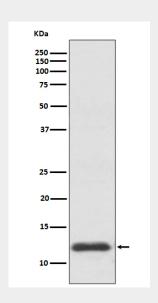
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus (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
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRX1 Antibody - Images



Western blot analysis of TRX1 expression in HepG2 cell lysate.