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# TXN Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20358b

## Product Information

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|---|---|
| **Application** | WB, IHC-P, E |
| **Primary Accession** | P10599 |
| **Other Accession** | P11232, P08628, P82460, P10639, O97680 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Mouse, Pig, Rabbit, Rat, Canine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 11737 |
| **Antigen Region** | 66-94 |

## Additional Information

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| **Gene ID** | 7295 |
| **Other Names** | Thioredoxin, Trx, ATL-derived factor, ADF, Surface-associated sulphydryl protein, SASP, TXN, TRDX, TRX, TRX1 |
| **Target/Specificity** | This TXN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-94 amino acids from the C-terminal region of human TXN. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | TXN Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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|---|---|
| **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, 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).

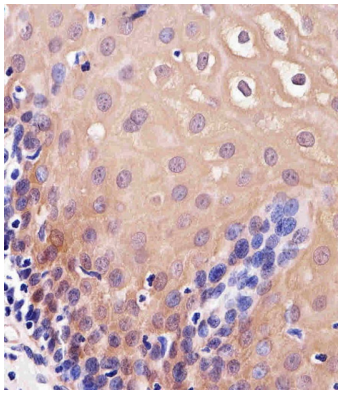
**Cellular Location**

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).

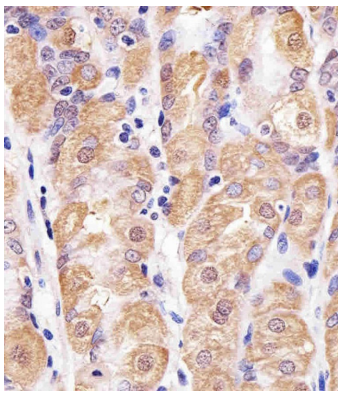
## Background

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. 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. ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).

## Images

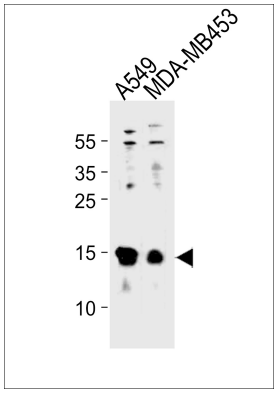


Immunohistochemical analysis of paraffin-embedded H. esophagus section using TXN Antibody (C-term)(Cat#AP20358b). AP20358b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. stomach section using TXN Antibody (C-term)(Cat#AP20358b). AP20358b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

TXN Antibody (C-term) (Cat. #AP20358b) western blot analysis in A549,MDA-MB453 cell line lysates (35ug/lane).This demonstrates the TXN antibody detected




the TXN protein (arrow).

## Citations

- The Antimetastatic Effect and Underlying Mechanisms of Thioredoxin Reductase Inhibitor Ethaselen.
- Butaselen prevents hepatocarcinogenesis and progression through inhibiting thioredoxin reductase activity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.