

TXN / Thioredoxin / TRX Antibody
Rabbit Polyclonal Antibody
Catalog # ALS12487**Specification**

TXN / Thioredoxin / TRX Antibody - Product Information

Application	WB, IHC
Primary Accession	P10599
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	12kDa KDa

TXN / Thioredoxin / TRX Antibody - Additional Information**Gene ID** 7295**Other Names**

Thioredoxin, Trx, ATL-derived factor, ADF, Surface-associated sulphhydryl protein, SASP, TXN, TRDX, TRX, TRX1

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

TXN / Thioredoxin / TRX Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TXN / Thioredoxin / TRX 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: [16408020](http://www.uniprot.org/citations/16408020), PubMed: [17606900](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11118054), PubMed: [11118054](http://www.uniprot.org/citations/11118054)).

href="http://www.uniprot.org/citations/9108029" target="_blank">9108029).

Cellular Location

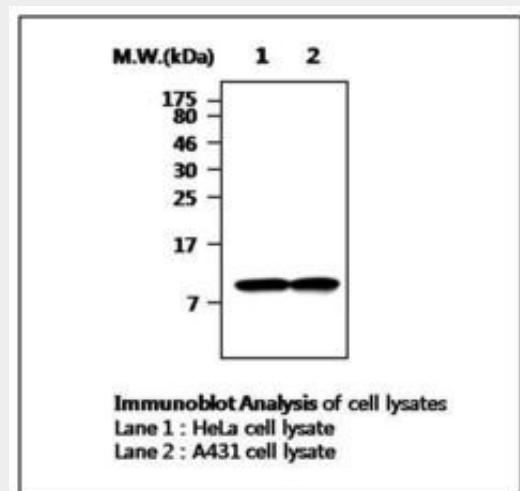
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus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

TXN / Thioredoxin / TRX Antibody - Protocols

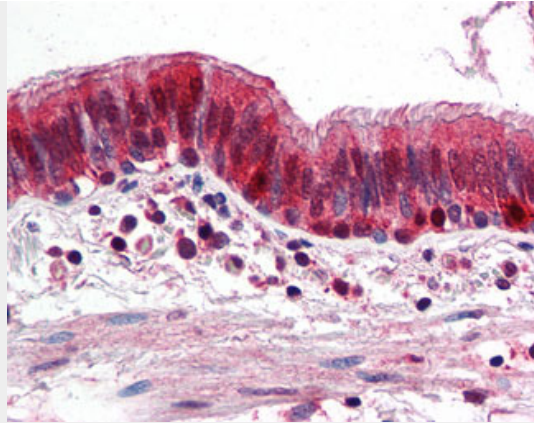
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

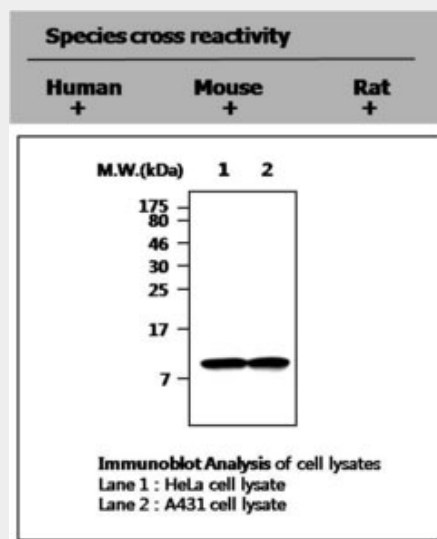
TXN / Thioredoxin / TRX Antibody - Images



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Anti-Thioredoxin antibody IHC of human lung.



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TXN / Thioredoxin / TRX Antibody - 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.

TXN / Thioredoxin / TRX Antibody - References

- Wollman E.E.,et al.J. Biol. Chem. 263:15506-15512(1988).
- Tagaya Y.,et al.EMBO J. 8:757-764(1989).
- Tonissen K.F.,et al.Gene 102:221-228(1991).
- Reddy P.G.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
- Liu A.,et al.Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.