

**TXN Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8661b****Specification**

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**TXN Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P10599</a>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	11737

**TXN Antibody - Additional Information****Gene ID** 7295**Other Names**

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

**Target/Specificity**

This antibody is generated from a mouse immunized with a recombinant protein from human.

**Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**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 is for research use only and not for use in diagnostic or therapeutic procedures.

**TXN 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](#),

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

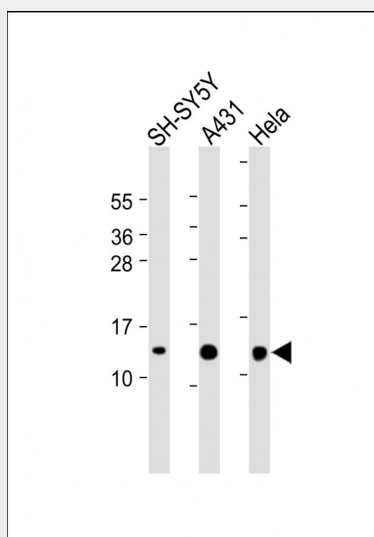
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:[9108029](#)). Predominantly in the cytoplasm in non irradiated cells (PubMed:[11118054](#)). Radiation induces translocation of TRX from the cytoplasm to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

#### TXN 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 Antibody - Images



All lanes : Anti-TXN at 1:2000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: A431 whole cell lysate Lane 3: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 12 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

#### TXN 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 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.