

Thioredoxin 1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52017

Specification

Thioredoxin 1 Antibody - Product Information

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

Thioredoxin 1 Antibody - Additional Information

Gene ID 7295

Other Names

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

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Thioredoxin 1 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: [9108029](http://www.uniprot.org/citations/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).

Thioredoxin 1 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](#)

Thioredoxin 1 Antibody - Images

Thioredoxin 1 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.

Thioredoxin 1 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.