

**Thioredoxin Polyclonal Antibody**  
Catalog # AP74248**Specification****Thioredoxin Polyclonal Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P10599</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Thioredoxin Polyclonal Antibody - Additional Information****Gene ID** 7295**Other Names**

Thioredoxin (Trx) (ATL-derived factor) (ADF) (Surface-associated sulphhydryl protein) (SASP)

**Dilution**

IHC~~IHC-p: 100-300.WB 1:500-2000, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Thioredoxin Polyclonal 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</a>, PubMed:<a href="http://www.uniprot.org/citations/19032234" target="\_blank">19032234</a>, PubMed:<a href="http://www.uniprot.org/citations/2176490" target="\_blank">2176490</a>). 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:<a href="http://www.uniprot.org/citations/16408020" target="\_blank">16408020</a>, PubMed:<a href="http://www.uniprot.org/citations/17606900" target="\_blank">17606900</a>). 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:<a href="http://www.uniprot.org/citations/11118054" target="\_blank">11118054</a>, PubMed:<a href="http://www.uniprot.org/citations/9108029" target="\_blank">9108029</a>).

### Cellular Location

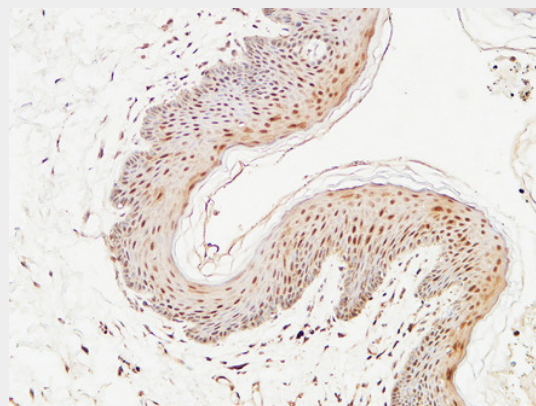
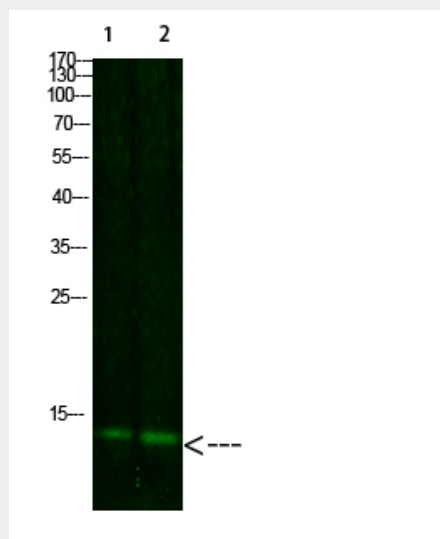
Nucleus. Cytoplasm. Secreted Note=Translocates from the cytoplasm into the nucleus after phorbol 12- myristate 13-acetate induction (PMA) (PubMed:9108029). Predominantly in the cytoplasm in non irradiated cells (PubMed:11118054). Radiation induces translocation of TRX from the cytoplasm to the nucleus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

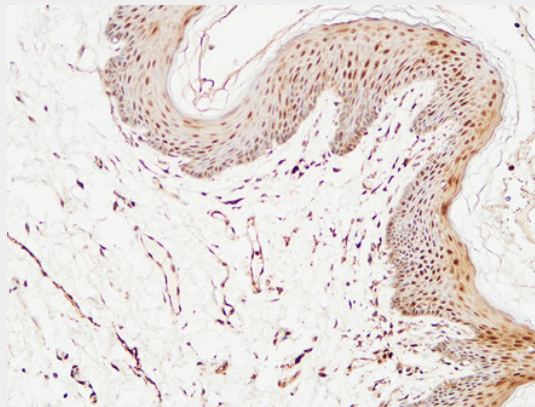
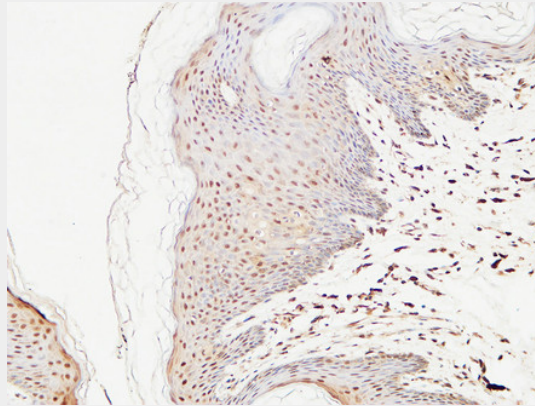
### Thioredoxin Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images





### **Thioredoxin Polyclonal 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.