

Product datasheet

Anti-Thioredoxin / TRX antibody ab57676

1 Image

Overview

<b>Product name</b>	Anti-Thioredoxin / TRX antibody
<b>Description</b>	Mouse monoclonal to Thioredoxin / TRX
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment, corresponding to amino acids 1-106 of Human Thioredoxin/ TRX

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: None PBS, pH 7.2
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab57676** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
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WB

**Application notes** WB: Use at a concentration of 1-5 µg/ml.

Not yet tested in other applications.  
Optimal dilutions/concentrations should be determined by the end user.

## Target

### Function

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).

### Sequence similarities

Belongs to the thioredoxin family.

Contains 1 thioredoxin domain.

### Post-translational modifications

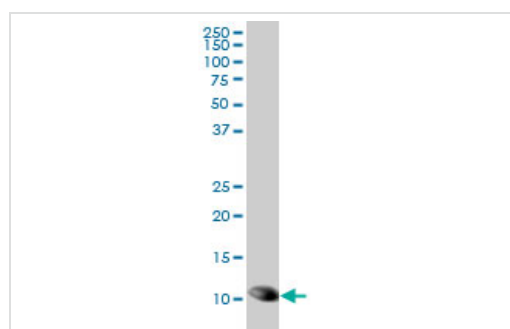
In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins.

In case of infection, ubiquitinated by *S.typhimurium* protein slrP, leading to its degradation.

### Cellular localization

Nucleus. Cytoplasm. Secreted. Secreted by a leaderless secretory pathway. Predominantly in the cytoplasm in non irradiated cells. Radiation induces translocation of TRX from the cytoplasm to the nucleus.

## Images



Western blot - Thioredoxin / TRX antibody (ab57676)

**Predicted band size :** 12 kDa

Thioredoxin / TRX antibody (ab57676) at  
1ug/lane + HeLa cell lysate at 25ug/lane.

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