

Product datasheet

Anti-Thioredoxin / TRX antibody [8A1] ab16845

2 References 1 Image

Overview

<b>Product name</b>	Anti-Thioredoxin / TRX antibody [8A1]
<b>Description</b>	Mouse monoclonal [8A1] to Thioredoxin / TRX
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, IP, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant full length protein (Human).
<b>Positive control</b>	293T whole cell lysate.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.03% Sodium Azide Constituents: 50% Glycerol, 0.01% BSA, HEPES, 0.15M Sodium chloride
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	8A1
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab16845** 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
ELISA		Use at an assay dependent dilution.

Application	Abreviews	Notes
IP		Use a concentration of 1 - 2 µg/ml.
WB		Use at an assay dependent dilution.

## 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

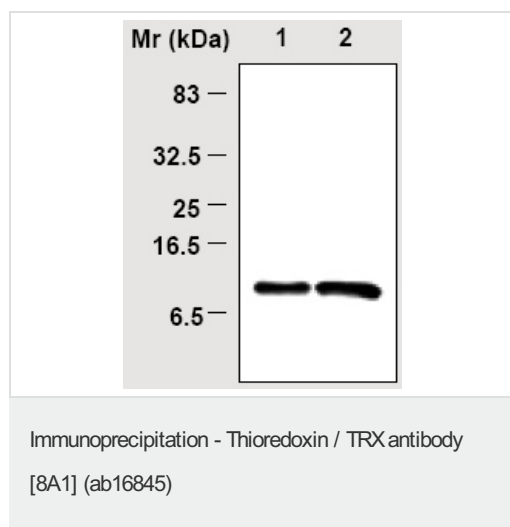
In the fully reduced protein, both Cys-69 and Cys-73 are nitrosylated in response to nitric oxide (NO). When two disulfide bonds are present in the protein, only Cys-73 is nitrosylated. Cys-73 can serve as donor for nitrosylation of target proteins.

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



Immunoprecipitation analysis of 293T cell lysates using ab16845.

Lane 1: Input.

Lane 2: Precipitates.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors