

## Product datasheet

### Anti-Thioredoxin / TRX antibody [EPR6111] ab109385

Recombinant RabMAb

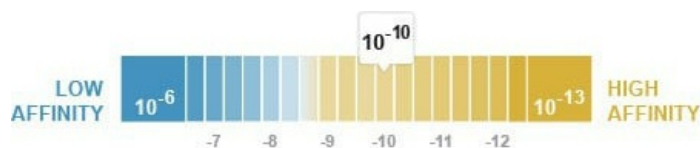
[4 References](#) [3 Images](#)

#### Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Thioredoxin / TRX antibody [EPR6111]   |
| <b>Description</b>         | Rabbit monoclonal [EPR6111] to Thioredoxin / TRX  |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human   |
| <b>Immunogen</b>           | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.   |
| <b>Positive control</b>    | MCF-7, THP-1, HeLa and HepG2 cell lysates   |
| <b>General notes</b>       | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> |

#### Properties

|  |  |
|--|--|
| <b>Form</b>                                  | Liquid   |
| <b>Storage instructions</b>                  | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| <b>Dissociation constant (K<sub>D</sub>)</b> | K <sub>D</sub> = 1.03 x 10 <sup>-10</sup> M                    |



[Learn more about K<sub>D</sub>](#)

|                       |   |
|-----------------------|---|
| <b>Storage buffer</b> | <p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS</p> |
|-----------------------|---|

|                     |                    |
|---------------------|--------------------|
| <b>Purity</b>       | Protein A purified |
| <b>Clonality</b>    | Monoclonal         |
| <b>Clone number</b> | EPR6111            |
| <b>Isotype</b>      | IgG                |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab109385 in the following tested applications.

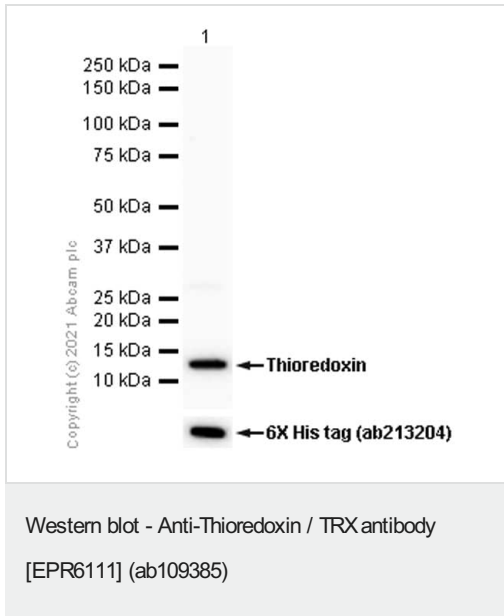
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| <b>WB</b>   |           | 1/10000 - 1/50000. Predicted molecular weight: 12 kDa. |

## Target

|   |  |
|---|--|
| <b>Function</b>                         | <p>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.</p> <p>ADF augments the expression of the interleukin-2 receptor TAC (IL2R/P55).</p> |
| <b>Sequence similarities</b>            | <p>Belongs to the thioredoxin family.</p> <p>Contains 1 thioredoxin domain.</p>  |
| <b>Post-translational modifications</b> | <p>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.</p> <p>In case of infection, ubiquitinated by S.typhimurium protein slrP, leading to its degradation.</p>   |
| <b>Cellular localization</b>            | <p>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.</p>   |

## Images



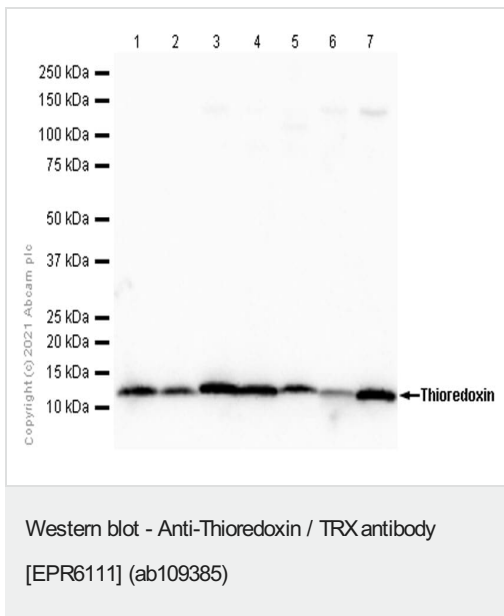
Anti-Thioredoxin / TRX antibody [EPR6111] (ab109385) at 1/1000 dilution (Purified) + His-tagged human Thioredoxin recombinant protein (aa 1-105)

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa



**All lanes :** Anti-Thioredoxin / TRX antibody [EPR6111] (ab109385) at 1/1000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 2 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

**Lane 3 :** NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

**Lane 4 :** C2C12 (Mouse myoblasts myoblast) whole cell lysate

**Lane 5 :** Mouse brain lysate

**Lane 6 :** PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

**Lane 7 :** C6 (Rat glial tumor glial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 12 kDa

**Observed band size: 12 kDa**

Why choose a recombinant antibody?

|  |  |
|--|--|
|  <p><b>Research with confidence</b><br/>Consistent and reproducible results</p> |  <p><b>Long-term and scalable supply</b><br/>Recombinant technology</p> |
|  <p><b>Success from the first experiment</b><br/>Confirmed specificity</p>      |  <p><b>Ethical standards compliant</b><br/>Animal-free production</p>   |

Anti-Thioredoxin / TRX antibody [EPR6111]  
(ab109385)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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