

Product datasheet

Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free ab240292

Recombinant RabMAb

5 Images

Overview

Product name	Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free
Description	Rabbit monoclonal [EPR15225] to Thioredoxin 2 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Thioredoxin 2 aa 100 to the C-terminus. The exact sequence is proprietary. Database link: Q99757
General notes	Ab240292 is the carrier-free version of ab185544 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab240292 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15225
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab240292** 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
WB		Use at an assay dependent concentration. Detects a band of approximately 12 kDa (predicted molecular weight: 18 kDa).
Flow Cyt		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

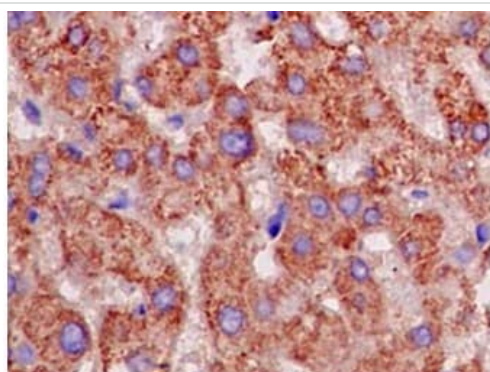
Relevance

Thioredoxins (Trx) are small, multi-functional proteins with oxidoreductase activity and are ubiquitous in essentially all living cells. Trx contains a redox-active disulfide/dithiol group within the conserved Cys-Gly-Pro-Cys active site. The two cysteine residues in the conserved active centers can be oxidized to form intramolecular disulfide bonds. Reduction of the active site disulfide in oxidized Trx is catalyzed by Trx reductase with NADPH as the electron donor. The reduced Trx is a hydrogen donor for ribonucleotide reductase, the essential enzyme for DNA synthesis, and a potent general protein disulfide reductase with numerous functions in growth and redox regulations. Specific protein disulfide targets for reduction by Trx include protein disulfide isomerase(PDI) and a number of transcription factors such as p53, NF- κ B and AP-1. Trx is also capable of removing H₂O₂, particularly when it is coupled with either methionine sulfoxide reductase or several isoforms of peroxiredoxins.

Cellular localization

Mitochondrial

Images

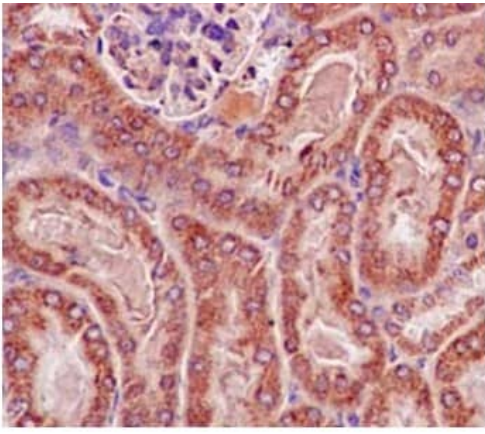


Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling Thioredoxin 2 with [ab185544](#) at 1/500 dilution. Counter stain Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185544](#)).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free ([ab240292](#))

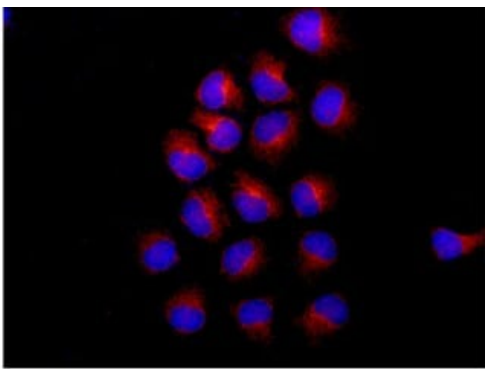


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free (ab240292)

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling Thioredoxin 2 with [ab185544](#) at 1/500 dilution. Counter stain Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185544](#)).

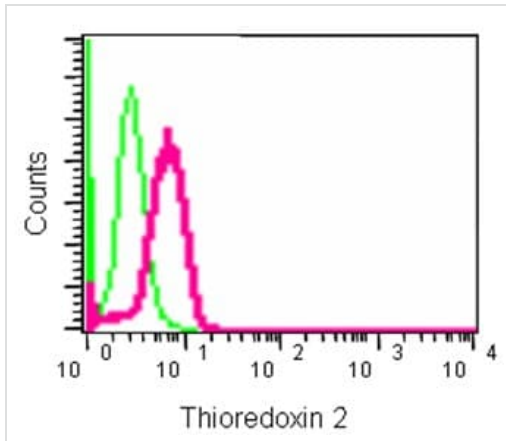
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free (ab240292)

Immunofluorescent analysis of 4% paraformaldehyde fixed HeLa cells labeling Thioredoxin 2 with [ab185544](#) at 1/250 dilution. Secondary antibody Goat anti rabbit IgG (Alexa Fluor®555) at a 1/200 dilution. Counterstained with Dapi blue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185544](#)).




Flow Cytometry - Anti-Thioredoxin 2 antibody [EPR15225] - BSA and Azide free (ab240292)

Flow cytometry analysis of 2% paraformaldehyde fixed K562 cells labeling Thioredoxin 2 with [ab185544](#) at 1/150 dilution (pink) or a rabbit IgG isotype control (green), followed by secondary Goat anti rabbit IgG (FITC) at 1/150 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185544](#)).

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

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

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- Response to your inquiry within 24 hours

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