

Product datasheet

Anti-Thioredoxin 2 antibody [4C5] ab16856

1 Image

Overview

Product name	Anti-Thioredoxin 2 antibody [4C5]
Description	Mouse monoclonal [4C5] to Thioredoxin 2
Host species	Mouse
Tested applications	Suitable for: ELISA, IP Unsuitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant full length protein (Human).
Positive control	293T cell lysate

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 50% Glycerol, PBS
Clonality	Monoclonal
Clone number	4C5
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab16856** 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.
IP		Use a concentration of 2 µg/ml.

Application notes

Is unsuitable for WB.

Target

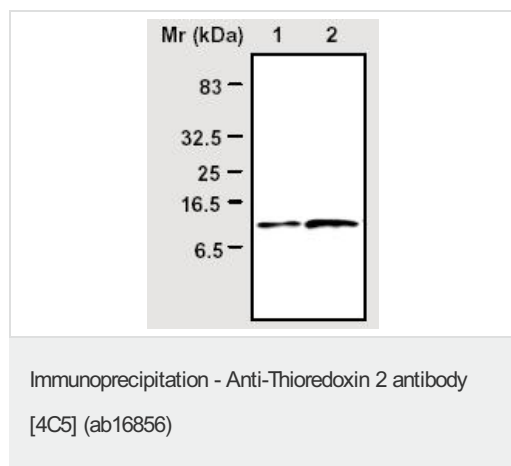
Relevance

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



Immunoprecipitation analysis of 293T cell lysates using ab16856 at 2 μ g/ml of cell lysate. Western blot using another Thioredoxin 2 antibody ([ab16836](#)).

Lane 1- Input
Lane 2- Precipitates

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