abcam

Product datasheet

Anti-Thioredoxin / TRX antibody ab26320

★★★★★ <u>5 Abreviews</u> <u>39 References</u> 5 图像

概述

产品名称 Anti-Thioredoxin / TRX抗体

描述 兔多克隆抗体to Thioredoxin / TRX

宿主 Rabbit

经测试应用 适用于: IP, WB, ICC/IF

种属反应性 与反应: Human, Chinese hamster

预测可用于: Mouse, Rat, Sheep, Cow, Cat, Pig ______

免疫原 Synthetic peptide conjugated to KLH derived from within residues 50 to the C-terminus of Human

Thioredoxin/ TRX. 参阅Abcam的专有抗源政策 (Peptide available as ab27815.)

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

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The Abpromise guarantee

Abpromise™承诺保证使用ab26320于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		Use a concentration of 5 µg/ml.
WB	★★★★☆ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).
ICC/IF	★★★★ <u>(2)</u>	Use at an assay dependent concentration.

靶标

功能

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).

序列相似性

Belongs to the thioredoxin family. Contains 1 thioredoxin domain.

翻译后修饰

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.

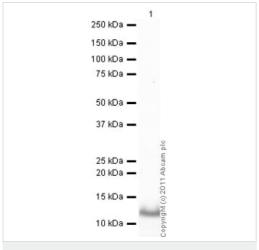
In case of infection, ubiquitinated by S.typhimurium protein slrP, leading to its degradation.

细胞定位

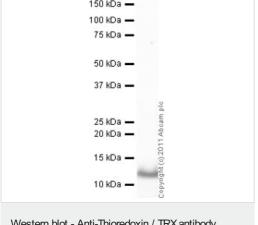
Nucleus. Cytoplasm. Secreted. Secreted by a leaderless secretory pathway. Predominantly in the cytoplasm in non irradiated cells. Radiation induces translocation of TRX from the cytoplasm to

the nucleus.

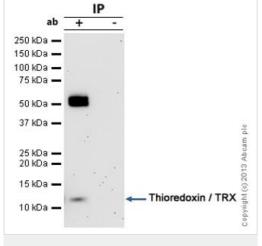
图片



(ab26320)



Western blot - Anti-Thioredoxin / TRX antibody



Immunoprecipitation - Anti-Thioredoxin / TRX antibody (ab26320)

Anti-Thioredoxin / TRX antibody (ab26320) at 1 µg/ml + Recombinant human Thioredoxin / TRX protein (Active) (ab51064) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 12 kDa

Exposure time: 30 seconds

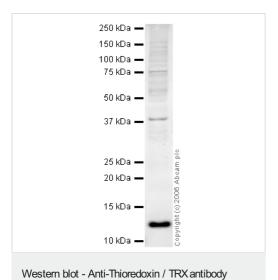
Thioredoxin / TRX was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Rabbit polyclonal to Thioredoxin / TRX and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab26320.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 12kDa; Thioredoxin / TRX



(ab26320)

Anti-Thioredoxin / TRX antibody (ab26320) at 1 $\mu g/ml$ + HeLa whole cell lysate at 20 μg

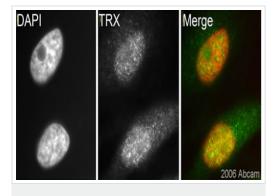
Secondary

Goat polyclonal to Rabbit lgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 12 kDa Observed band size: 12 kDa

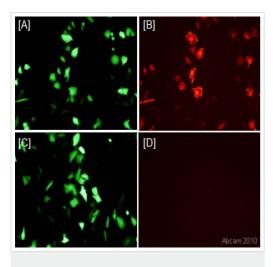
ab26320 detects a band of 12 kDa in HeLa, Jurkat and A431 whole cell lysates. The data for the Jurkat and A431 lysates is not shown.



ab26320, at 1/200 dilution, staining human TRX in assynchronous HeLa cells by ICC/IF.

Immunocytochemistry/ Immunofluorescence - Anti-Thioredoxin / TRX antibody (ab26320)

This image is courtesy of an Abreview submitted by Dr Kirk McManus



Immunocytochemistry/ Immunofluorescence - Anti-Thioredoxin / TRX antibody (ab26320)

This image is courtesy of an abreview submitted by Dr David Tonge, Wolfson CARD, Kings College London

Immunofluorescent detection of Thioredoxin /TRX using antibody ab26320. Chinese Hamster Cell (Ovary cells) were fixed in formaldehyde and permeabilized in 0.1% Triton X in PBS/3% BSA. Primary antibody was incubated at 1/1000 for 1h @ 4°C in PBS containing 3% BSA. Secondary antibody: anti-rabbit conjugated to Alexa Fluor® 568 used @ 1/300. CHO cells cotransfected with plasmids encoding GFP and a mutated form of human thioredoxin which does not enter the nucleus, and labelled using ab26320 (1/1000) and Alexa 568 (1/300). Panel [A] demonstrates GFP immunoreactivity. [B] thioredoxin immunoreactiv; many of the same cells are immunoreactive for both GFP and thioredoxin. Panel [D] thioredoxin primary antibody was omitted, hence there is no immunoeactivity.

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